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THE TRANSPORTATION WEEKLY

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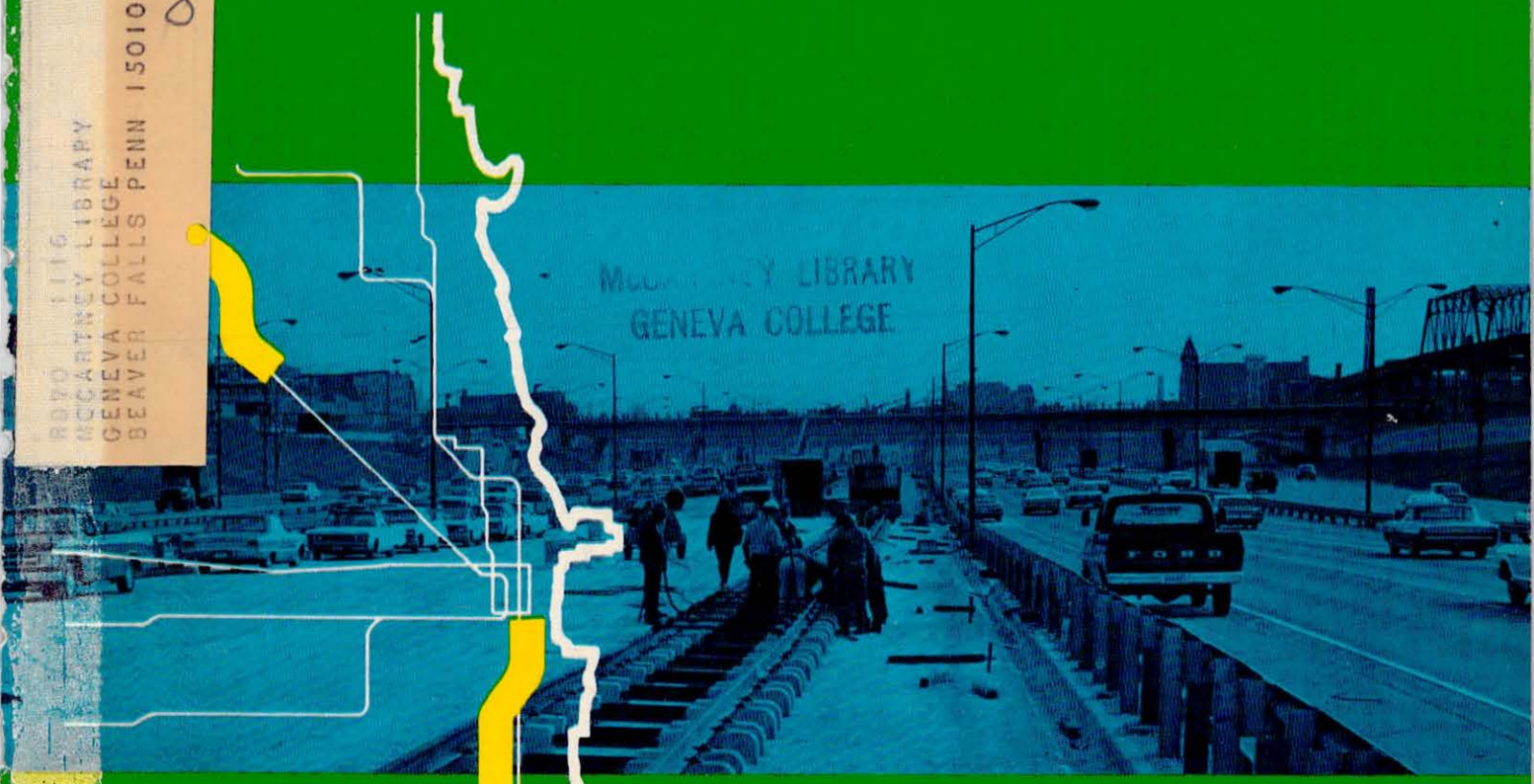

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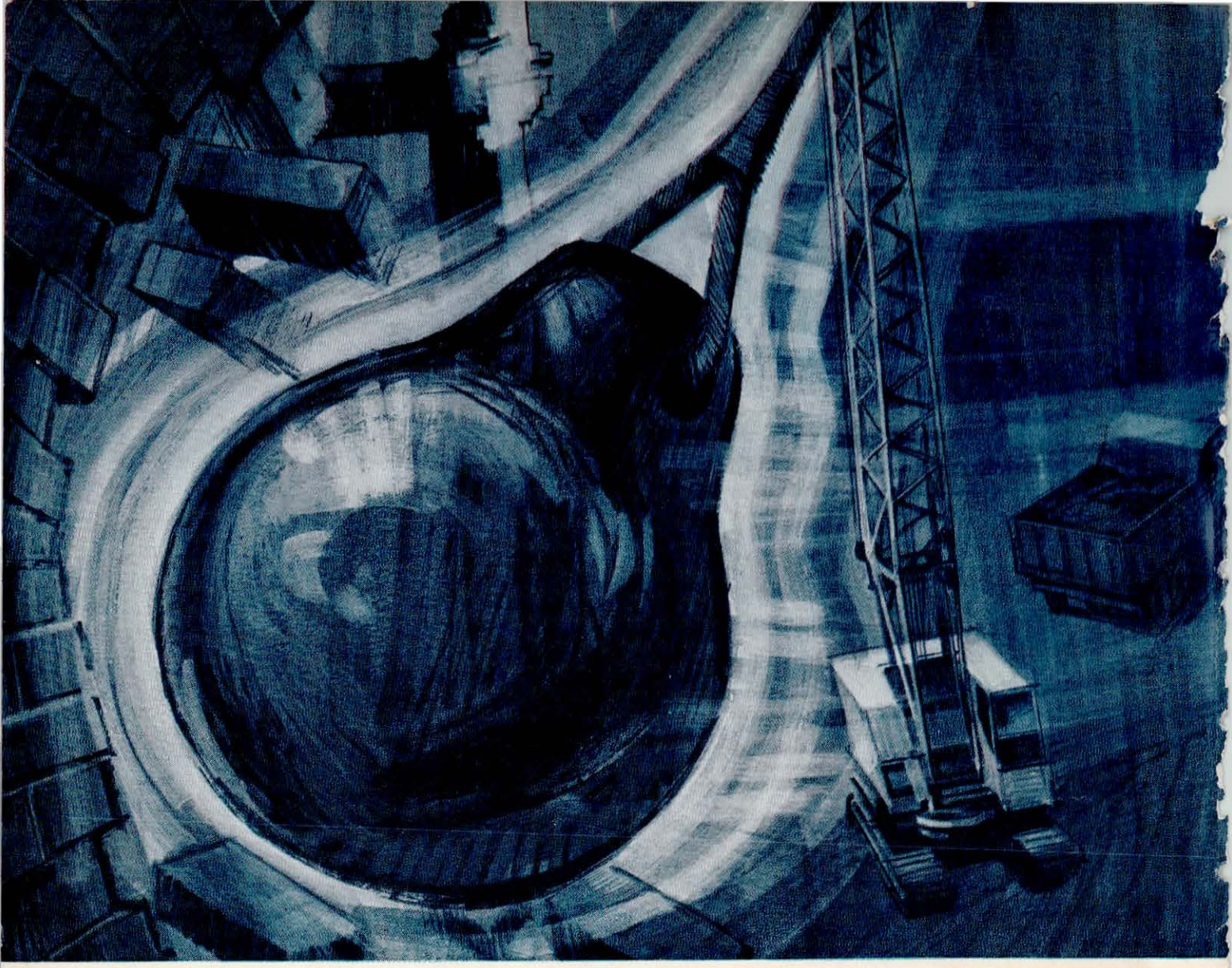

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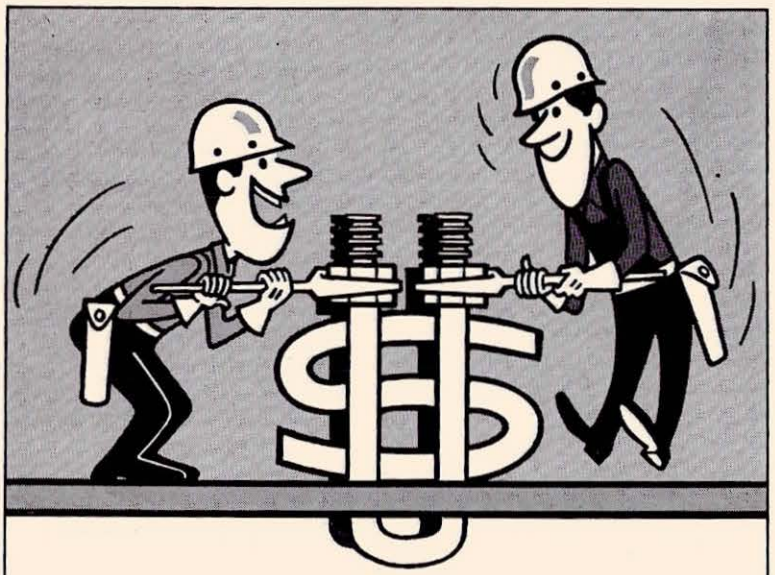

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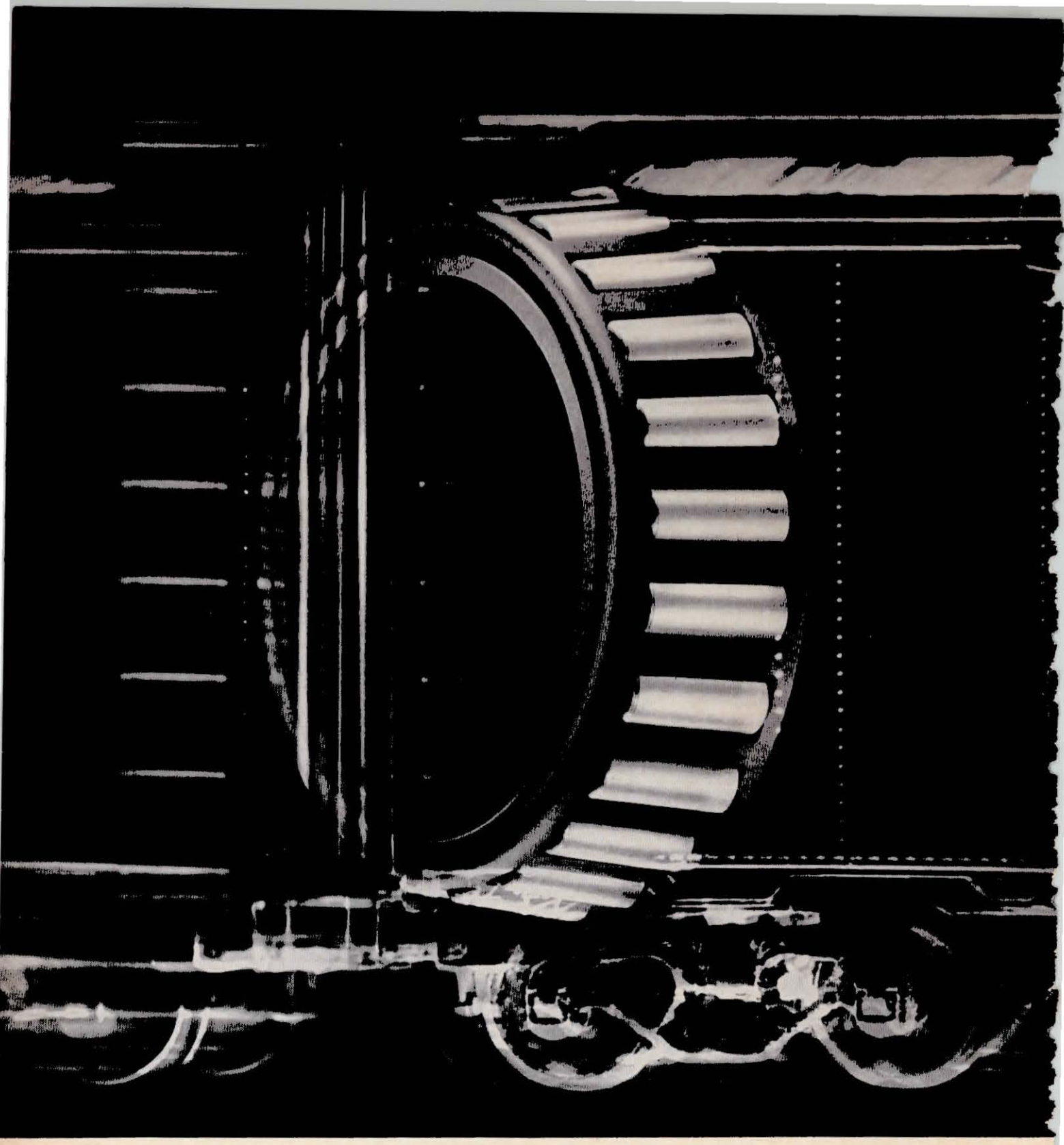

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RAILWAY AGE

Jan. 6/13, 1969 • Vol. 166, No. 1

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Annual Review & Outlook: A detailed statistical report on railroad operations in 1968 . . . a review of major industry developments . . . and an in-depth look at 1969, in terms of projected capital spending, the outlook on the labor and legislative fronts, and anticipated developments in engineering, mechanical, and signal and communications departments.

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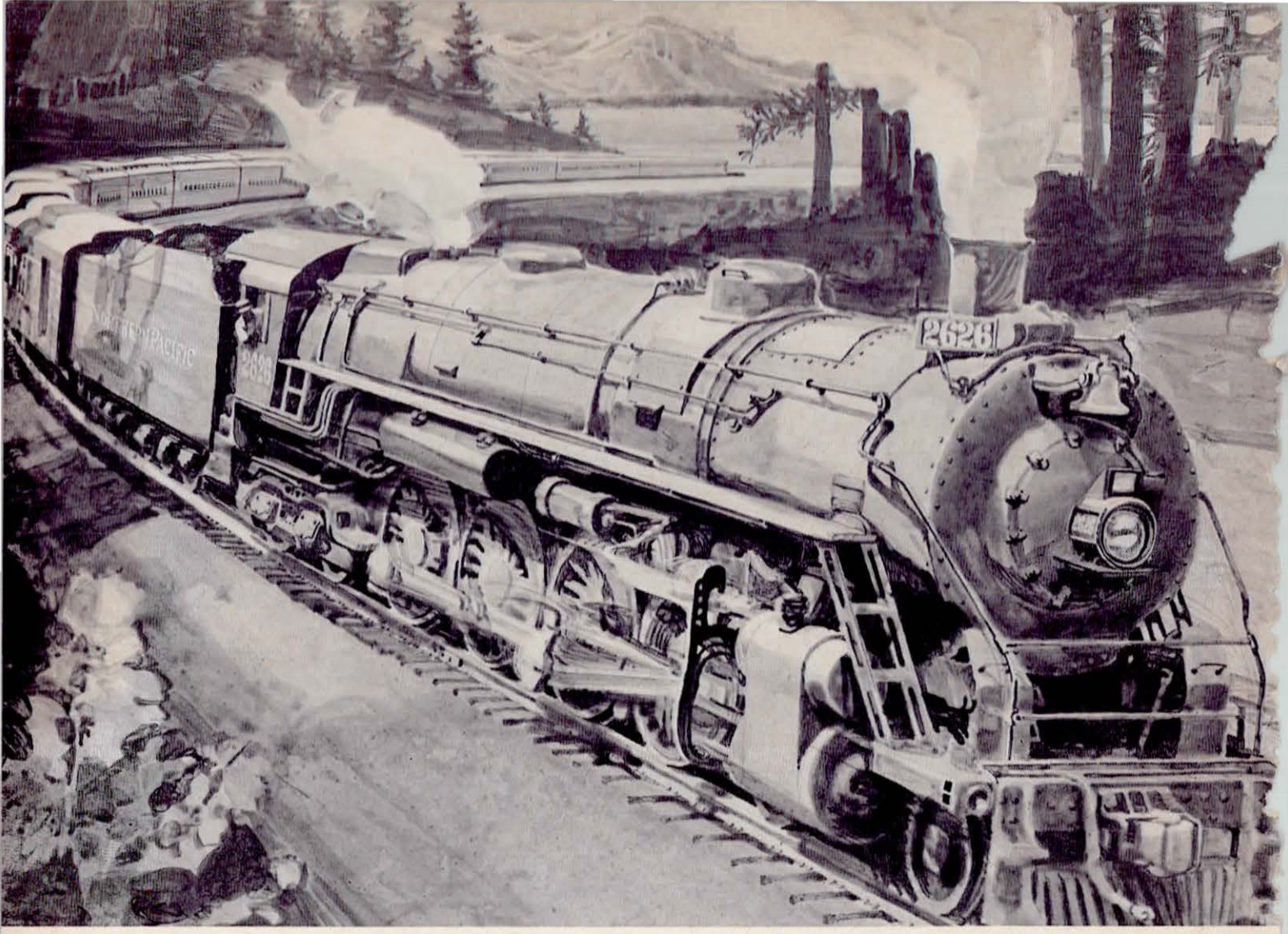

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SHORT AND SIGNIFICANT

Grayson succeeds Gilliland as Frisco president Richard C. Grayson, a man whose railroad background borders on the unique, is the new president of Frisco. He succeeds J. E. Gilliland, who will continue as chairman and chief executive officer. In a Frisco career stretching back to 1941, Grayson has had experience in operations and sales, rail and highway. He came up through the operating side and, in the past 12 years, has served as assistant general manager; vice president and general manager of Frisco Transportation Co., Frisco's trucking subsidiary; railway general sales manager; and vice president-operation. Grayson's successor as VPO is James H. Brown, formerly assistant vice president-general manager.

Japan will host 1970 symposium on cybernetics The third Symposium on Railway Cybernetics will be held in Tokyo April 12-17, 1970, under the joint auspices of the International Railway Union (UIC) and the Japanese National Railways. The first symposium was held in Paris in 1963, and the second in Montreal in 1967.

CN's Turbos withdrawn for modifications Canadian National's Turbos were suspended from service Jan. 6, less than one month after going into operation between Montreal and Toronto. Reason: Numerous breakdowns in auxiliary power systems due to exposure of unprotected parts to unusually severe weather. While maintaining an excellent 90-to-100% load factor, the United Aircraft-designed trains had a less-than-good 60% reliability record. So they were withdrawn for modifications that are expected to be completed within a month.

ICC will probe service costs of TOFC/COFC The Interstate Commerce Commission views piggyback as unique among rail freight service, so in a search for real railroad costs ICC has assigned its Bureau of Accounts to probe TOFC/COFC operations specifically. Calendar 1969 statistics will be used and will include ownership, rental and maintenance costs for trailers, containers and flat cars, plus costs of loading-unloading and street moves between rail terminals and shippers' docks. Also included will be time samples for piggyback operations from fiscal 1970.

New locomotives, modernized cars due for the CNJ The Central of New Jersey remains in bankruptcy—but a happier New Year is assured for CNJ commuters. Thirteen new 3,000-hp diesels, earmarked for passenger service, are being delivered this month. Meanwhile, 50 air-conditioned coaches are being purchased from other railroads; these will be renovated and phased into service. In addition, 65 existing CNJ commuter cars are being reconditioned. The EMD locomotives cost $3.4 million. The car program is budgeted at $2.4 million. All of the money is being put up by the Norfolk & Western and the Chesapeake & Ohio. The State of New Jersey will guarantee rental payments on the locomotives over a 15-year period; the state will repay the costs of the car program over a five-year period, subject to legislative appropriations.

For Frisco, a welcome challenge: Bring on 1969 Frisco is one road that's looking forward to 1969 with keen anticipation—and isn't bashful about saying so. In 1968, Frisco hit an all-time high in freight revenues—and the forecast is for further gains, "with an expected increase of up to 6% in freight revenue and an increase of approximately 3.4% in ton-miles." The road's freight sales last year topped $161 million, up about 10% from 1967 levels. One key to the '68 success story: Industrial development efforts also hit record-high levels last year, with location of about 100 plants which are expected to generate 33,000 carloads of freight and revenues of more than $6.5 million annually.

MONDAY MORNING REPORT

WHAT'S AHEAD FOR THE NEW HAVEN?

The Penn and the Central were ardent wooers, but the price of their wedding bands was custody of the bankrupt New Haven. The New Haven was included in the Penn Central System (at a price PC is disputing) on Jan. 1. Now everybody in New England wants to know where the New Haven is going. To answer the questions, PC staged a major press conference and dinner at Boston's Sheraton Plaza Jan. 7. Along with the press, shippers and business leaders were there to ask—and to hear.

"A FIRST CLASS RAILROAD," SAYS SAUNDERS

PC Chairman Stuart Saunders told them: "We are going to do everything possible to make a first class railroad out of the New Haven." He emphasized that acquisition of the New Haven—together with the existing Boston & Albany lines—gives PC "an enormous stake" in New England. Added PC President A. E. Perlman: "We will upgrade the New Haven as quickly as possible, reduce the deficit and reduce the cash outflow through greater efficiency at common points" (e.g., Boston, New York, Springfield, Worcester, Framingham).

BETTER SERVICE FOR FREIGHT CUSTOMERS . . .

Shippers using what is now the New Haven Region of the Penn Central will gain through, single-line service to many southern and western points—single-carrier responsibility as far west as Chicago and St. Louis, for example. PC's substantial pool of specialized equipment is now available to former NHRR shippers. Service advantages, as well as economies, will come through routing via the old B&A line to the new $29-million yard at Selkirk, N.Y.

. . . AND A NEW DEAL FOR PASSENGERS

PC is eager, said Perlman, to initiate the "restructuring" of intercity passenger services already requested (in a petition to the ICC) by the New Haven. Commuter operations between New Haven, Conn., and New York, will eventually be underwritten by the states of New York and Connecticut. An $80-million modernization program is part of that plan, but is still a year or two in the future. At last week's press conference, reporters were mainly interested in the New Haven's passenger operations—so much so that at one point Perlman asserted, "You are missing the point. You ought to be worried about the industrial health of New England and not concentrating on the passenger trains."

Gondolas get the dirty work. Having to eat all that scrap iron, and who knows what kind of junk, is awfully hard on the innards. So as cars go, gondolas don't last forever. But they'll last a little longer if they are started off on the right specs. Your specs. For your kind of tonnage. For your kind of weather. With the newest materials. Assembled in a workman-like manner. At Berwick.

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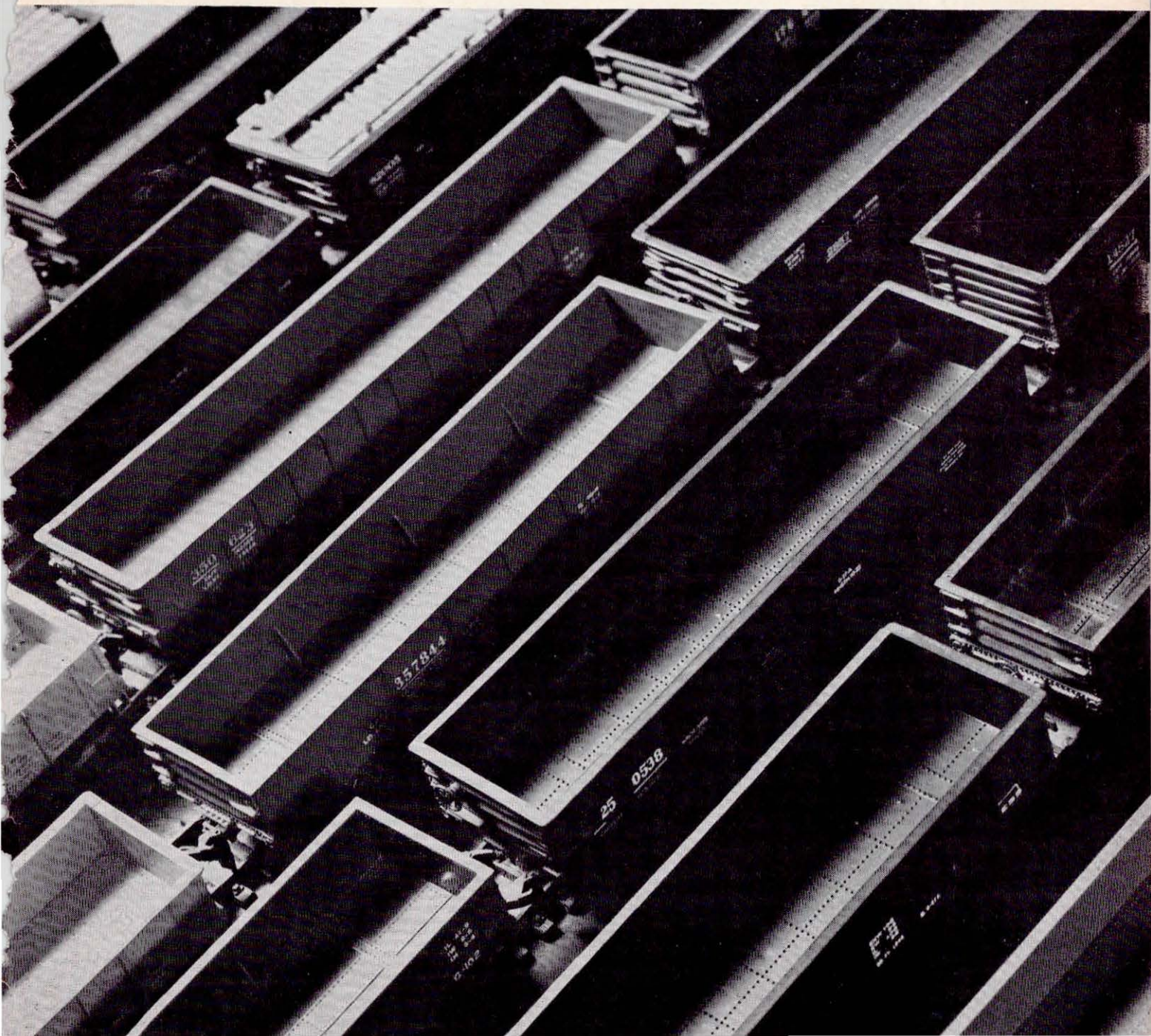

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WEEK AT A GLANCE

Record-breaking capital program set by C&NW

Chicago and North Western joined the ranks of the record-breakers in 1969 with a capital-improvement program totaling almost $72 million. That's double the road's 1968 expenditures, and about 16% above the previous spending high, recorded in 1966. Equipment acquisitions, including more than 2,500 new freight cars and 41 diesel-electric units, will account for more than $54 million of the 1969 program. C&NW is a subsidiary of Northwest Industries, and its 1969 improvement program may or may not tend to quiet fears of those who see disinvestment in railroading as the future for diversifiers or conglomerates in the industry. C&NW President Larry S. Provo makes it clear what his railroad is about: The '69 program, he says, is aimed at "substantially strengthening the railroad's ability to meet the service and equipment needs of our customers."

Thrall will build 1,000 new cars for the auto industry

The new year is starting on a high note for the carbuilding industry—and nowhere more so than at Thrall Car, which greeted '69 by adding up orders for about 1,000 new auto-parts box cars. Value of the orders: Almost $30 million. The high- and low-density parts cars are being acquired by an unspecified number of roads for auto-industry pool operations. Orders are about equally divided between 60-foot high-density cars and 86-foot low-density, high-cube cars. Deliveries will be completed by mid-year according to a Thrall spokesman.

CARLOADINGS FORECAST

Shippers Advisory Boards	Actual Loadings First Quarter, 1968	Estimated Loadings First Quarter, 1969	Percent Change
New England	81,798	82,344	0.7 Inc.
Atlantic States	450,643	434,028	3.7 Dec.
Allegheny	644,346	667,226	3.6 Inc.
Ohio Valley	869,802	880,511	1.2 Inc.
Southeast	1,016,173	1,027,836	1.1 Inc.
Great Lakes	428,053	430,486	0.6 Inc.
Central Western	230,349	220,667	4.2 Dec.
Mid-West	718,186	734,246	2.2 Inc.
Northwest	245,975	261,614	6.4 Inc.
Trans-Missouri-Kansas	354,639	369,477	4.2 Inc.
Southwest	411,899	433,520	5.2 Inc.
Pacific Coast	257,015	329,390	28.2 Inc.
Pacific Northwest	223,699	225,065	0.6 Inc.
Total	5,932,577	6,096,410	2.8 Inc.

Shippers see 5% jump in ton miles

The 13 Regional Shippers Advisory Boards are predicting a 2.8% increase in revenue carloadings in first-quarter 1969, as compared with first-quarter 1968. This would mean an increase of 5% in ton-miles, taking into account heavier loads per car and longer average haul. Only two of the boards (see table) are predicting a decline in loadings. A 9.5% increase is predicted in loadings of new automobile and trucks.

Wage disputes: Down to the wire?

Each of three remaining wage disputes was moving somewhere last week—but no one could be sure quite where. The Order of Railway Conductors & Brakemen set its proposed strike date back from Jan. 5 to Jan. 15, and conversations were going on. The Brotherhood of Locomotive Engineers, free to act Jan. 12, delayed setting any kind of action-date. And the Brotherhood of Railroad Signalmen stayed with a strike date of Jan. 16. Of the three disputes, some observers regarded the BRS case as most likely to wind up before an emergency board. Meantime, Illinois Central, Louisville & Nashville, Belt of Chicago and the Brotherhood of Railroad Trainmen (now in the United Transportation Union) were moving ahead with crew-by-crew studies as recommended by Emergency Board 172. And Great Northern got started Jan. 6 with a full-fledged apprentice-engineer training program, despite efforts by the Firemen (also now UTU) to block the move through court action.

GUS WELTY

LINES ON LABOR

A RAILROAD isn't all that easy to understand—even from the inside. Thankfully, however, an increasing number of roads are trying to do something about the understanding gap—trying to broaden the knowledge of the individual employee, particularly the newcomer, about his industry and his company. The effort is welcome, if belated.

MISSOURI PACIFIC broke the ice last year with an excellently-done employee handbook (RA, July 5, 1968, p. 11). Chicago & North Western personnel people are now working on an orientation film. And, hot off the presses from Santa Fe, there's another admirable example of what can be done, handbook-fashion.

SANTA FE'S BOOKLET, prepared largely in the public relations department, holds a good information mix—a good blend of answers to questions concerning the company and how the individual fits into it.

THE TONE of the whole presentation is refreshing. President John S. Reed leads it off with a brief comment—which tells the individual, among other things that "you will find here a receptive outlet for your talents and ideas. And the only limit you will find to your future is the limit of your desires, abilities and effort. We look forward to working with you."

THERE IS ALSO a summing-up that tells it straight: "It may sound old-fashioned in this day and age to talk about the sense of satisfaction that comes to one from the knowledge that he has done a good day's work. But that satisfaction is very real and is a worthy objective."

MUCH COULD BE SAID about the need for communication between employer and employee, both new employee and veteran. It's easy—and perhaps accurate—to criticize the industry for past failures to communicate. Company publications are occasionally a mixture of froth, pap and baby pictures. Hard-hitting communication with employees comes only when management is in trouble, or so it sometimes seems. There are continuity gaps which lead to credibility gaps. And the railroad employee is no dum-dum: If he's going to be courted or loved or talked with, he'd just as leave have it on a going-steady basis.

SOME SAY, of course, that communication with employees is an impossible job, a lost cause. Hopefully, that view is a minority one. Things going on at MoPac, C&NW, Santa Fe and on other roads may indicate that it is.

New-car orders may top 65,000

It now appears that slightly more than 65,000 new freight cars were ordered in 1968. Statistics for the complete year won't be available for another month. But the November report, released last week, added 9,641 new cars to the list, for an 11-month total of over 55,000 cars. It's believed that at least 10,000 new cars were ordered in December. Deliveries of new cars in November totaled 4,097, indicating a 12-month figure in the neighborhood of 55,000.

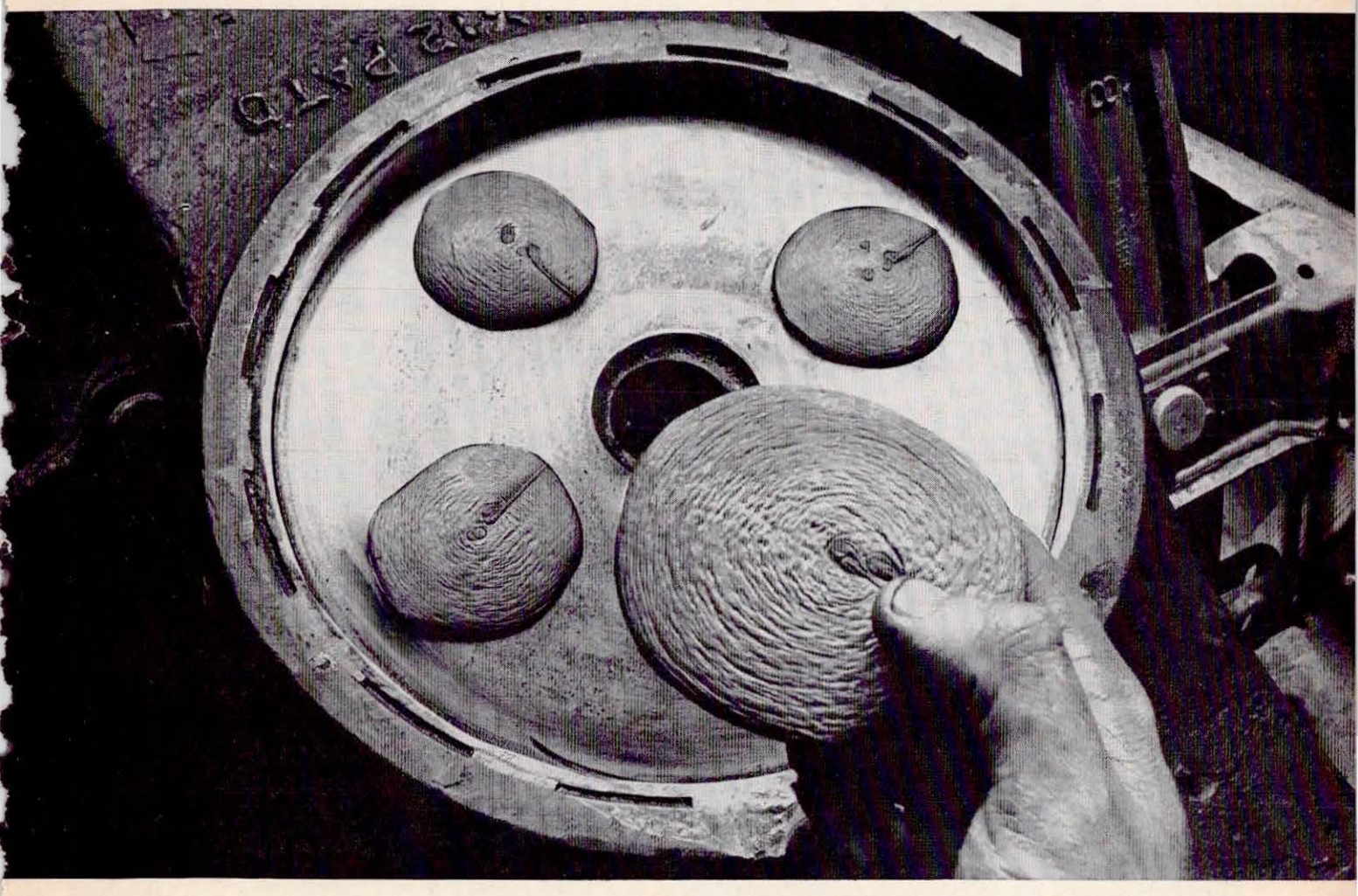
Alco Locomotive on the block

Alco Locomotive, Inc., a builder with a history stretching back to the 1830s, has been put up for sale by parent Studebaker-Worthington, Inc. Other groups (RA, Sept. 23, 1968, p. 114)—Alco Products Service, Alco Engine, and Alco Forge & Spring—will also go on the block. While it is hoped to sell Alco and its product lines, individually or collectively, as going-concern operations, S-W decided to eliminate them from its corporate structure. The depressed state of 1968's domestic locomotive market and foreign financing cutbacks which adversely affected export locomotive sales were major factors in the S-W decision. Steps are being taken to protect owners of Alco equipment; plant operations are continuing and parts and servicing will be available. S-W Canadian locomotive building subsidiary, MLW-Worthington, is not involved in the restructuring and will continue its operations.

It's official: ICI, and Abex merge

Armed with a favorable Internal Revenue Service ruling on the tax-free nature of the share exchange, Illinois Central Industries and Abex Corp. announced completion of their merger on the day after Christmas. In top-level changes which were effective with merger, ICI President and Chief Executive Officer W. B. Johnson was elected chairman of ICI; Kempton Dunn, formerly chairman of Abex, was elected vice chairman of ICI and chairman of the Abex executive committee.

Shell invents centerplate lubricant discs.



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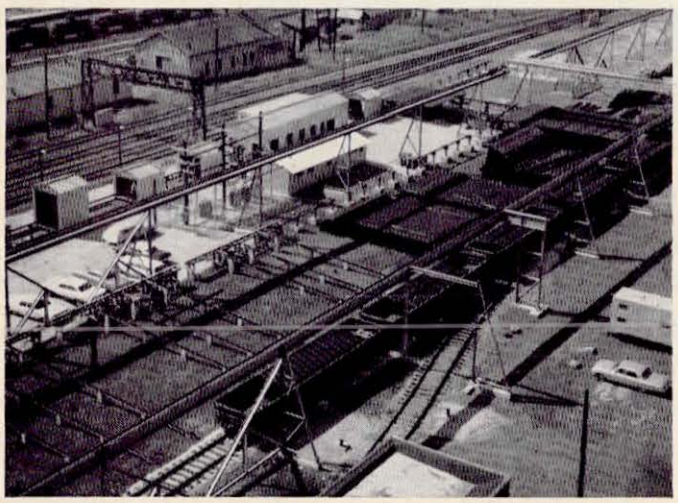
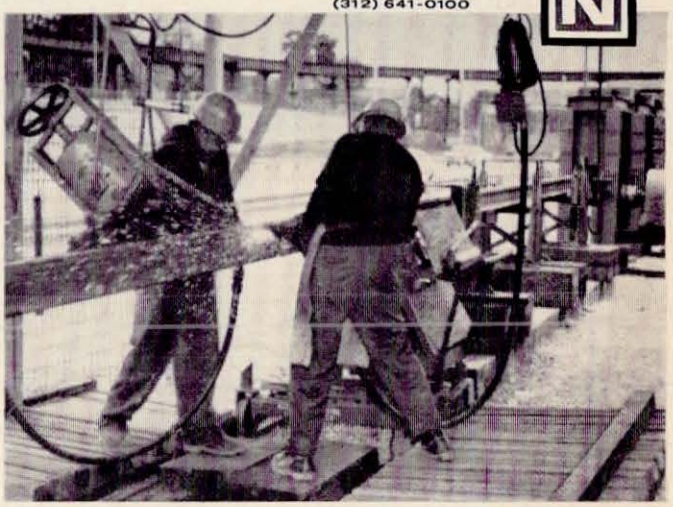


Penn Central's permanent rail welding plant, designed and built by Ramco, produces 200 track miles of rail every year.



Ramco mobile rail welding equipment at work building 30 miles of new track for the city of Chicago.

Circle 7 on coupon page 31

130 new cars assured for IC riders

A $25.2-million grant from the U. S. Department of Transportation, coming through in the waning moments of '68, could mean that by mid-1970, or maybe sooner, Illinois Central's 40,000 daily commuters in the Chicago area will be riding in a sparkling new 130-car fleet of air-conditioned, electric-powered, double-deck suburban cars. The federal grant, approved just 4½ months after it was requested by the Chicago South Suburban Mass Transit District, will be added to a $12-million loan promised the district by IC itself, thus permitting replacement of the road's existing 274-car fleet of 42-year-old commuter coaches.

With the equipment-financing hurdle now cleared, the next move is "to get a formal bid proposal package into the hands of the carbuilders as quickly as possible," said Richard W. Austin, chairman of the transit district's board of trustees. The transit district, made up of 11 south-suburban communities strung along IC's three-line system, will be the owner of the new multiple-unit cars, and will lease them to the railroad at a rate which will permit repayment of the road's $12-million loan. Also, under terms of its agreement with the railroad, the district plans to have the IC establish a sinking fund from profits above a certain level to assure availability of capital for future replacement of equipment.

The federal grant gives a major boost to the IC's previously announced Commuter Advance Program, a four-point plan which, in the words of Paul H. Reistrup, vice president-passenger services, "is designed to produce the best commuter operation in the world." In addition to acquiring new equipment (which the IC conceded was the top priority item), the CAP plan calls for: (1) reduction in the number of inner-city stations; (2) simplification of the fare structure; and (3) coordination of operations with the CTA.

All points in the CAP plan are in various stages of development, Reistrup said. Very shortly, the IC plans to file an application with the Illinois Commerce Commission for the establishment of a new zonal fare system. This system, Reistrup added, will not only simplify the commuter fare structure but could also contribute to the improvement of train scheduling in and out of Chicago's Loop area. ■

LUTHER MILLER

AS THE EDITOR SEES IT

THE HEAD-CHOPPERS—It is well known that in ancient times the bearer of bad news oftentimes had his head chopped off. It is a more recent phenomenon that the bearer of good news is also a candidate for the chopping block.

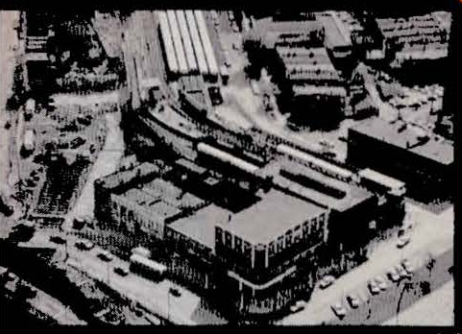
GOOD NEWS CAN BE BAD—In the railroad industry, it works like this: A reporter discerns an optimistic trend. Maybe earnings are up. Maybe freight-car orders are rising. Whatever it is, he writes it up. So what happens? Likely as not, some party-liner will get on the phone and demand, "What are you trying to do, kill us with your optimism? How can we ever persuade Congress that we're in trouble, or the ICC that we need a rate increase, if you keep writing things like that?"

THE DISTORTERS—Sad to say, there is some merit in the argument that good news can be injurious, 1984ish though it may sound. There are far too many people—among the railroads' competitors; among their own labor chieftains—who seize upon any scrap of optimism to try to prove that the railroads are really just a bunch of rich crybabies. So the enemy distorts the news. Is this any valid reason to distort it in return—to shade the picture darker than it really is? We think not.

ON TO 1969—All of this is by way of fair warning to the gloom merchants that they are in for a dose of good news—and it will appear in next week's issue of Railway Age. The occasion will be our annual Review & Outlook Issue. For several weeks now our editors have been trying to fit the pieces of the 1969 jigsaw together. They have talked to chief executives about spending plans; to industrial traffic men about traffic trends; to Wall Streeters about financial developments. Final projections are still being worked out—but it is already clear that 1969 is shaping up as one of the best in recent railroad history.

IF THIS BE TREASON—Grave problems remain, to be sure, and these will not be glossed over—rising wages and costs; the glaring inequities created by government-subsidized competition; new and bitter labor fights. But the pluses won't be ignored, either. Traffic will be at an all-time high. Capital spending will be close to record levels. The innovators will be working harder than ever to retain old carloads and win new ones. One other prediction can safely be made: There will continue to be those, within and without the industry, who will detect a death rattle in every distress symptom. We won't be among them.

1 THE LOGAN SQUARE TERMINAL of present elevated line is shown above. Cut-and-cover subway to carry tracks to Kennedy Expressway median strip is being built.



JEFFERSON PARK

KENNEDY EXPRESSWAY CTA EXTENSION

1

LOGAN SQUARE

CHICAGO "LOOP"

LAKE STREET LINE

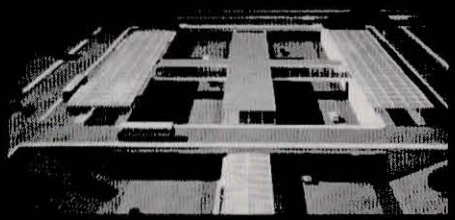
CONGRESS LINE

2

2 SEGMENT OF ELEVATED STRUCTURE that will connect tracks in Dan Ryan Expressway median strip with the present elevated structure south of Chicago's Loop is shown here.

LAKE

MICHIGAN

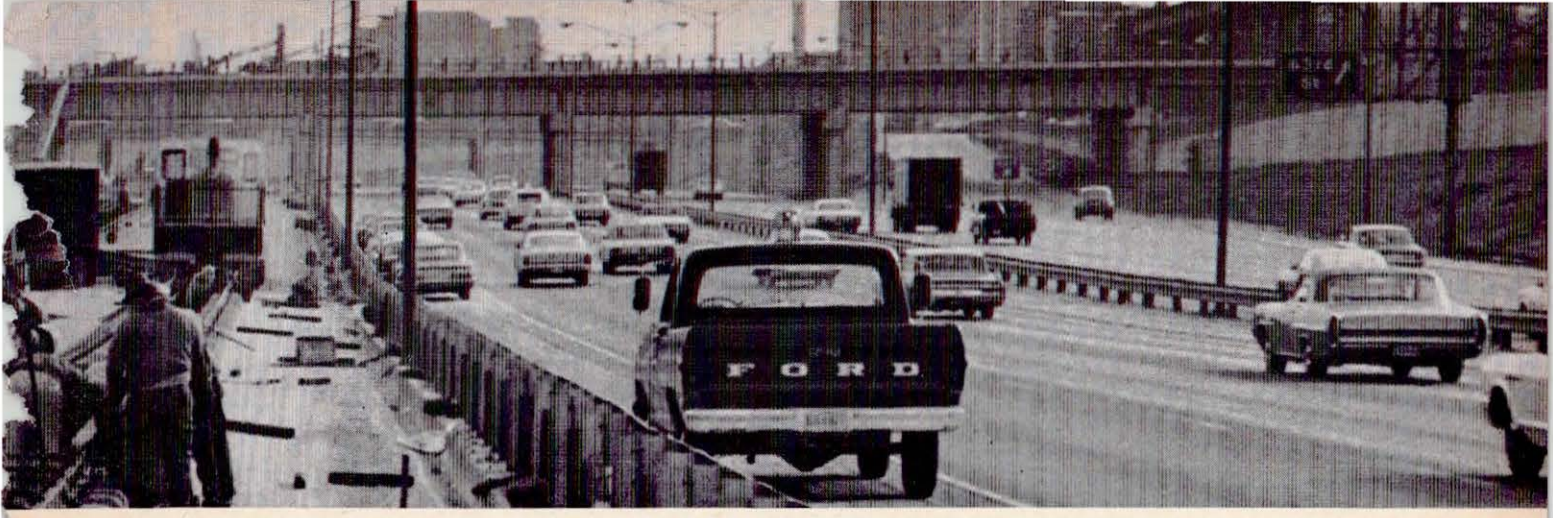


3 ARCHITECT'S MODEL (above) of rapid transit terminal being built at 95th Street. Below, Dan Ryan Expressway, looking north from about 99th Street. Building under construction in foreground is CTA repair shop.

DAN RYAN EXPRESSWAY CTA EXTENSION

3

95th STREET



RAIL/HIGHWAY TRANSIT:

Chicago's median course

Playing it down the middle, Chicago is laying 14.5 miles of rapid transit lines in the median strips of two expressways.

Chicago planners have an antidote for urban sprawl. Long-range plans for functional and structural development of the city depend to an important extent on what are called "corridors of high accessibility."

These are linear areas served by a combination of rail and highway transportation facilities. The purpose is to provide a location policy for centers of intensive activity—regional business areas, high-density housing, industrial districts—at appropriate sites along the corridors.

Basically, however, the corridors serve as transportation arteries, mainly for the purpose of moving people and goods between the central business district and the city's outskirts. In Chicago a definite pattern of development for such corridors has emerged. First, an expressway with median strip is built. Later—perhaps years later—a double-track extension to the Chicago Transit Authority's network of rapid transit lines is built in the median strip.

● **A tested concept.** The concept of the high accessibility corridor was first tested in Chicago when the Congress rapid transit line was constructed in the median strip of the Eisenhower Expressway, which slices its way westward from the central business district. The rapid transit extension in this corridor hooks up with the Dearborn Street subway in the "Loop" and reaches to Des Plaines Avenue, more than nine miles to the west.

Now the median strips of two other expressway systems are scenes of intense construction activity aimed at early completion of extensions to the CTA rapid-transit system. One is the Dan Ryan Expressway extension which will extend from a connection to the existing south side elevated structure between 16th and 18th Streets to 95th Streets, a distance of 9.8 miles. The other is the Kennedy Expressway extension which, located mostly in the median strip of the Kennedy Expressway, will extend 4.7 miles northwesterly beyond the existing elevated terminal at Logan Square.

Result of these extensions will be to project the benefits of high-speed rail transportation into areas not now served by such transportation. The effect also will be to strengthen the existing system of high-capacity transportation routes that radiate like the spokes of a wheel from the Loop area or Central Business District. The Dan Ryan Expressway extension is a southerly "spoke" on which train service will in effect be an extension of the present Lake Street route. This route, another "spoke" in the wheel, extends directly west from the Loop nine miles, partly on an elevated structure and partly on an embankment carrying tracks of the Chicago & North Western that lead to the Galena division. The Kennedy Expressway extension is a northwesterly "spoke" in the wheel, on which train service will in effect be an extension of a route that takes in the Congress rapid transit line.

● **An $84 million project.** Cost of the expressway extensions will be more than $84 million, which will include 150 air-conditioned cars to serve the new lines. Two-thirds of the cost is being met from Federal grants under the provisions of the Urban Mass Transit Act of 1964. The share of the City of Chicago will be paid from

TRACK FOR THE CTA EXTENSIONS IS SAID TO BE THE FIRST

Transit Bond funds approved under the 1966 Capital Improvements Bond Referendum.

Since the expressway extensions are city projects they were planned and are being carried out under the direction of Milton Pikarsky, Chicago's commissioner of public works. Designs, plans and specifications were prepared by a team of planners, designers, architects and engineers that included the firms of DeLeuw, Cather & Co., designing and coordinating engineers, and Skidmore, Owings & Merrill, which was responsible for the architectural concept of the stations, platforms and terminals. Engineers of the CTA were responsible for providing design standards as well as many other aspects of the projects, including power distribution systems, signal and communication systems and review and approval of all detailed designs.

Both the new lines required extensive construction work to provide connections with the existing routes. In projecting the Kennedy extension beyond the existing Logan Square elevated terminal the tracks are being brought down from the elevated structure into a cut-and-cover subway about 6,200 feet long, that extends under the southeast-bound and express lanes of the Kennedy Expressway to rise to the surface in the median strip. From this point the projected line continues northwesterly in the expressway nearly four miles to a terminal at Jefferson Park. Including the terminal, there are six stations on the Kennedy extension, two in the subway portion and four in the median of the expressway.

● **C&NW connection.** The terminal station at Jefferson Park will have a direct passageway connection to the existing Jefferson Park station of the C&NW's commuter service. The terminal station will also house a bus terminal and offices for transportation personnel operating the line.

A storage yard for 132 cars will be provided in the median beyond the terminal station. A car-maintenance building is also being constructed at this point.

The Dan Ryan Expressway extension, from where it connects with the existing elevated structure south of the Loop, will be located on a ballasted-deck elevated structure to about 24th Street where it gets on the right of way of a connecting expressway now under design. The extension will get on the median of the Dan Ryan Expressway at about 29 Street and will continue to occupy the median all the way to the terminal at 95th Street.

Ten stations including the terminal station will be provided on the Dan Ryan extension. At two of these, 69th and 95th Streets, bus interchange areas are being provided to permit direct transfers between the rapid transit line and connecting bus lines. Offices for transportation personnel are being provided at the 95th Street terminal, and a 130-car storage yard is being built south of 95th Street. A car inspection shop is being constructed at 98th Street.

Like a single project

Work on the two extensions is being controlled by critical path techniques from a PERT diagram. In many respects the two extensions are being treated as though they were a single project. Seven contracts for material for both projects were awarded covering such items as substation electrical equipment, fare collection equipment, cable, cars and rail. Five installation contracts were awarded for work on both projects for items such as track, substation buildings and substation electrical installations. In addition, twelve contracts on the Kennedy and ten contracts on the Dan Ryan have been awarded for work specifically applicable to each route, such as bridges, stations, shops and power distribution.

● **Welded rail, concrete ties.** The tracks for the extension consist of 100-lb RA-A Section rail laid on concrete ties of the French RS type. This is a two-block tie with the blocks connected by a steel angle gauge bar. About 60,000 ties will be required. The rail rests on a neoprene rubber tie pad and is held to the concrete blocks by two insulated spring clips. These in turn are each fastened to the tie by a tee-head bolt engaging a slot in the steel angle gauge bar. Spacing of the ties is 30 inches. The third rail is a 144-lb special section with porcelain insulators. Crushed limestone ballast is being placed to a minimum depth of 12 inches under the ties.

The track rails were delivered in 39-foot lengths which were welded into 828-foot strings on the job by the oxy-acetylene pressure welding process. After being laid in track the strings are being joined by the Boutet thermit welding process.

An 80-lb rail turned on its side on specially designed braces is being installed as a restraining rail on all curves with radii of 300 feet or less. Inner steel guard rails are being provided on all structures.

Heat-treated rail is being installed in the subway sections through turnouts, including closure and connecting rails, on curves with radii of 400 feet or less and on connecting spirals. The purpose is to obtain longer service life from the rail at critical locations.

Creosote-treated oak timber ties are being installed through turnouts and other special trackwork and on ballasted-deck structures. For open-deck structures creosoted yellow pine ties are being used.

The tangent track is intended for a maximum speed of 70 mph. On the Dan Ryan, 300 feet is the minimum radius for curves and the speed on curves of this radius will be limited to 25 mph. On the Kennedy the minimum-radius curve will be 700 feet (42 mph). The maximum grade on all routes is 4%.

Protection for the median strips will be provided by highway guard rails backed by chain link fencing 5 feet high.

● **"Functional esthetic" stations.** Stations on the CTA extensions are being built of steel and glass and, said E. E. Olmstead, CTA superintendent of engineering, "are designed functionally and esthetically to provide efficient and pleasant fare collection and entrance to the rapid-transit stations. Considerable effort was exerted to make the stations and platforms light, graceful, easily maintained, and building interiors devoid of nooks and crannies." The stations are readily visible from adjacent streets and highways. Treadle-activated moving stairways and parallel stairways are provided for all vertical passenger movement.

In designing the station layouts emphasis was placed on the functional relationship between the feeder bus system on the one hand and the station and rapid transit trains on the other. Whenever possible the design has been arranged to simplify and ease the passenger flow from bus to rapid transit train and vice versa.

All stations will have island platforms

OF ITS KIND FOR USE IN A RAPID TRANSIT SYSTEM

which are designed to accommodate eight-car trains at the outset but which ultimately can be extended to handle 10-car trains. Canopies constructed of steel-framed plastic will extend the full lengths of the platforms and will be sufficiently wide to extend beyond the center lines of the adjacent tracks. The platforms are 24 feet, 19 feet or 12 feet wide depending on whether they are located at a terminal, at a wide median-strip section or a narrow median strip section.

Lighting of the platforms will be of the continuous-row fluorescent type. Infrared passenger-controlled heaters will be provided at windbreaks on the platforms.

Operation of the trains will be with cab signals based on audio frequency circuits, with four aspects providing for over-speed control at 15, 25, 35 and 70 mph. Train phone service will provide instant communication between train crews and the traffic control center. Power will consist of 600-volt direct current remotely controlled by automatic substations with silicon rectification. The cars will be lightweight, high-speed, air-conditioned units, comparable to the CTA 2000 class, and to be built by the Budd Co.

● **CTA rapid-transit first.** The track being built for the CTA extensions is said to be the first of its kind (welded rails on concrete ties) for use in a rapid transit system. Another unusual aspect of the track construction is that a single company—Railway Automated Machinery Co.—has the contract for furnishing the ties and welding the rails as well as constructing the tracks. Fabrication of the concrete ties is being carried out at a specially erected plant.

How work is scheduled

The work schedule called for the track contractor to start work on the Dan Ryan first with the objective of shifting the work force to the Kennedy site as successive phases of the project were completed on the Dan Ryan. The work starts on the Kennedy were to follow the Ryan schedule by about two months.

The work of butt-welding and stockpiling the rail for the Dan Ryan got under way about the middle of June 1968. Manufacture of the concrete ties was started in July and the work of building the track began in August.

● **How rail is laid.** For the track construction work the contractor is using a train of 23 sets of railway car trucks rigged for transporting 10 of the 858-foot rail strings. In the track-building operation the train of car trucks with a load of welded rails is pushed ahead of a diesel locomotive to the end of the track already built. A Speed Swing crane is then used to pull two of the strings one by one off onto the ties that have previously been distributed on the new roadbed. When these strings have been secured in position to the concrete ties, the train of car trucks is moved ahead and the procedure is repeated.

The completion date of the Dan Ryan extension was originally set at Dec. 28, 1968, with completion of the Kennedy extension to follow soon thereafter. However, due to an unforeseen delay in acquiring land for the Dan Ryan in the vicinity of 18th Street, the completion date for this extension has been pushed back to March 1. ■

Different modes have to "do their thing"

Large-scale construction of expressways in and around Chicago has not solved the traffic congestion problem. Increasingly, the city is turning to a combination of modes, each with a particular purpose and "doing its own thing." Hence, multimodal traffic corridors.

Expressways, well enough adapted to round-the-clock service and a wide variety of origins and destinations, take second place to rapid transit when it comes to moving high volumes of passengers into and out of dense areas with minimum consumption of high-priced land.

A single lane of highway has a theoretical carrying capacity of 4,000 to 4,500 vehicles per hour—each typically carrying one or at most two riders at rush hours. A single lane of railroad track has a practical carrying capacity of 40,000 to 50,000 riders per hour—about ten times more.

In Chicago, officials predict that the Dan Ryan's median strip transit line will carry about 100,000 riders per day, and the Kennedy line about 70,000. Since the bulk of this transit riding will come at peak morning and late afternoon hours, it amounts to adding that much carrying capacity to the expressways, but at a fraction of what extra highway lanes would have cost.

Chicago has other big transit plans. The Illinois Central, for example, is getting ready to revamp its commuter operation entirely by introducing 130 high-speed air-conditioned suburban cars.

The U.S. Department of Transportation last week announced approval of a $25.2 million capital grant to pay two thirds of the cost of the cars. The local public agency putting up the matching one-third of $12 million is the Chicago South Suburban Mass Transit District, representing communities served by IC commuter trains.

(The double-decker design was described in RA, Aug. 5, 1968, p. 16.)

Now under study is the City of Chicago's plan for tearing down the Loop Elevated line, putting in a Loop subway and building a cross-town distributor line across the Loop at a cost of $600 million.

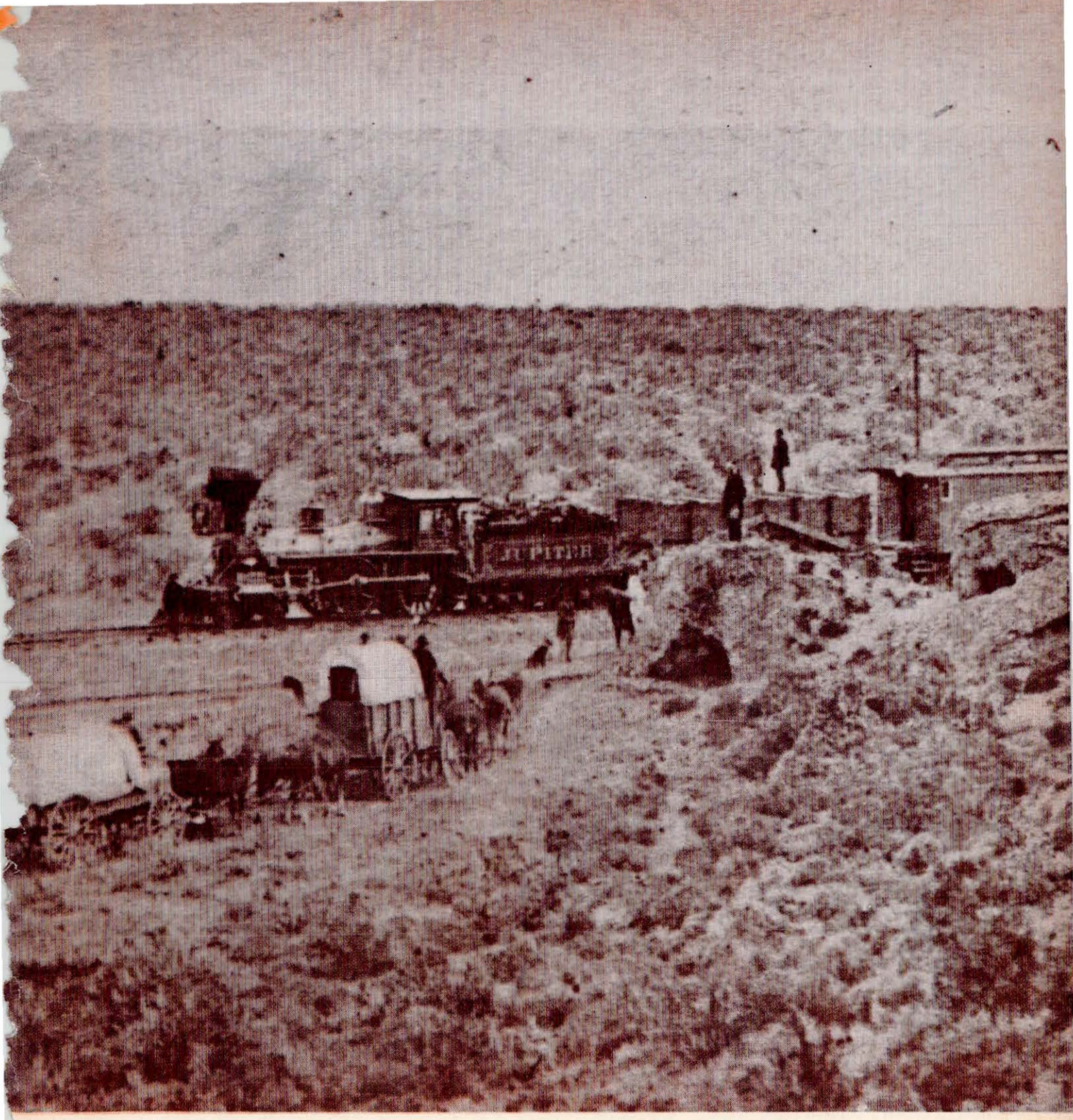
Suddenly, 100 years ago, there

Cecil B. DeMille would have loved it.

Here was California Governor Leland Stanford's special train headed east for Promontory, Utah. Headed west was one of the last wagon trains of emigrants bound for California. Two days later—on May 10, 1869—Stanford drove the golden spike to mark completion of the transcontinental railroad.

Linking East and West by rail was one of the great engineering feats of all time. Railroaders blasted their way through the Rockies, threw bridges across rivers and chasms, cut and filled enough earth to bury and rebury the Pyramids, beat off persistent Indian attacks.

What railroaders proved beyond their own skill and daring was the special virtue of the railroad idea itself. Governor Stanford's "Jupiter" and attendant cars look quaint, to be sure. But here was prefigured the future of volume transportation—terrific power and capacity packed into a narrow space, the low friction of steel



was a new way to go west

wheel rolling on steel rail, the great savings of a multiplicity of towed vehicles, the efficiency of "guided movement" (today, this advantage has escalated: only the rail-guided train lends itself naturally to automation), the economy of one "driver" up front. Here was a fit vehicle for building the west.

Today, the Iron Horse is still the best vehicle in sight for building the kind of volume transportation system America will need to hold her place in the world. That's the message of RAILWAY AGE's May 10, 1969 "Golden Spike Centennial" issue. It will be 1 part nostalgia, 10 parts exciting future: the next 100 years in railroad technology. You belong in it! Important extra distribution. Closing date: April 28.

Be part of the weekly excitement in **RAILWAY AGE** *the transportation weekly*

WHAT LOOKS BIG IN '69

- New York: Start on Second Ave. subway; 400-car order.
- New York suburban: New LIRR car fleet; NH take-over; new cars for Jersey commuters.
- Philadelphia: Broad St. extension and new midtown tunnel.
- Philadelphia suburban: DRPA line opens; new SEPTA cars.
- Boston: Digging on three lines; 76 new cars arriving.
- Chicago: Two new lines; 150 new cars arriving.
- Cleveland: All cab signaling and new power facilities.
- Bay Area: Construction still in high gear; 250-car order.
- Toronto: Digging one new line.

WHAT MAY JELL IN '69

- Baltimore: $1.7 billion system proposed.
- Pittsburgh: Studies for new system.
- St. Louis: Studies for new system.

READY FOR ANOTHER ROUND IN '69?

- Los Angeles: Bond issue defeated, studies under review.
- Seattle: Same.
- Atlanta: Same.

Transit: Dirt will fly in '69

Capital spending plans totaling nearly $1 billion are subject to qualification. But there will be important digging this year—plus groundwork for pending projects.

A complete new subway for New York City; continued construction on the Bay Area Rapid Transit system; and important line extensions in Chicago, Philadelphia, Boston and Toronto—these projects highlight capital plans for rapid transit in the U.S. and Canada in 1969.

In addition, 1969 may be the turning point on some other major plans: Groundbreaking for the Washington subway; revised proposals for Atlanta, Los Angeles and Seattle (where voters have previously rejected bond issues); and action on proposals for Baltimore, St. Louis, Pittsburgh, and Montreal.

Dr. William Ronan, chairman of New York State's Metropolitan Transportation Authority and president of the Institute for Rapid Transit, announced that a total of 200 miles of new rapid transit lines costing over $3.2 billion are either under construction or authorized.

A check of 14 leading transit agencies by Railway Age indicated that their capital spending in 1969 may reach $992 million. This figure should be qualified in two respects: a) It includes federal and state matching grants and assumes they will be all approved; b) It includes a large amount of non-rapid transit spending.

Nevertheless, important capital outlays for new lines, stations, rolling stock and other equipment are firmly planned by many—and still others may join in to swell the figure.

Dr. Ronan as head of the MTA, which controls the New York City Transit Authority, promised that the dirt "would start to fly" in 1969 on construction of the NYCTA's new Second Avenue subway.

The NYCTA's capital budget for the fiscal year beginning July 1, subject to city approval, is $243.5 million. Construction work will begin on sections of Second Avenue in Manhattan, and on some connecting links in the Bronx.

In addition, first phase construction is due to begin on an extension of the IRT line in Brooklyn, and on the 63d St. East River tunnel and its links to existing lines.

Other items in that budget are $53.4 million for 400 new air-conditioned transit vehicles and $11.5 million for modernizing power distribution facilities.

The parent MTA will spend $115 million on capital improvements for commuter service in 1969, the lion's share of it for the LIRR.

Over 300 of the 620 new cars ordered from Budd for the Long Island will be delivered in the course of the year.

About $20 million will be spent on extension of electrification from Mineola to Huntington, L.I. That project includes new aluminum third rail, and sub stations, and should near completion late this year.

Another $5 million is slated for terminal improvements necessary for servicing the new cars, as well as for radio/phone installations, and maintenance of way equipment. MTA also has an allocation of $2.5 million for purchase of used diesel-hauled coaches to add to the car fleet.

Design work is also going ahead on the rapid transit link via LIRR tracks from Manhattan to Kennedy Airport.

● **New Haven.** The acquisition of the New Haven by the Penn Central at last clears the way for the two state agencies, the MTA in New York and the Connecticut Transportation Authority, to go ahead with plans to take over NH commuter operations and revamp them completely.

MTA officials report they are ready with $16 million to begin the NH modernization program—of which $8 million is to begin the work of buying new cars, upgrading right of way and making station improvements. The final figure will of course be higher.

● **Heavy construction on PATH.** The Port Authority Trans-Hudson Corp. announced capital projects in 1969 worth $4.5 million. Major expenditures are toward construction of the $45 million transportation complex at Journal Square in Jersey City and a start on the new Manhattan terminal below the World Trade Center.

For the latter, PATH announced the first contracts, one for $1.5 million to install five platform tracks, and $1.4

million to WABCO for designing and installing a complete signal interlocking system.

● **Bond money in Jersey.** Approval by the voters of a $640 million bond issue including $240 million for mass transport improvements will be translated into action soon. The state allocation for mass transit under the bond issue is for $27 million in 1969, and federal matching funds of $21 million are anticipated. With other funds, the total capital budget for this purpose may range between $50 and $65 million.

Areas covered include new cars (besides the 35 just acquired from General Steel Industries for the Penn Central), stations, grade separations, track, and extension of electrification. A good bet is the beginning of a program to revamp service on the Erie Lackawanna and Jersey Central.

● **DRPA begins service.** The $92 million 14.5-mile line between Philadelphia, Camden and Lindenwold, N.J. began revenue service last week.

Initial service is between Camden and Lindenwold, with full service into Philadelphia starting next month. DRPA officials have spoken of long-range expansion to other points in southern New Jersey, but no short-range ones are on the horizon.

The Southeastern Pennsylvania Transportation Authority announced a $270 million capital program for the next six years, to include acquisition of 108 more Silverliner commuter cars for the Penn Central and Reading, work on subway extensions (SEPTA acquired the subways last year) and improvements to stations and fixed facilities.

For the fiscal year beginning next July 1, SEPTA announced a capital budget of $72.6 million. Work should start this year on the Broad St. Subway extensions, and on the mid-town tunnel connecting two commuter lines.

● **Boston.** The Massachusetts Bay Transportation Authority has $68 million in construction contracts ready to go in 1969—50% more than in 1968.

Continued construction of the 6.1-mile-long Haymarket-North extension will take $32.7 million; $30.1 million is for completion this year of the South Shore extension to Braintree; $5.1 million for modernizing eight more transit stations.

MBTA will also take delivery of 76 modern cars from Pullman-Standard; and on the South Shore line will have cab signaling installed by General Railway Signal and ACI by Sylvania Electric.

Due out shortly is a review of progress on the MBTA's master plan together with revised plans. It's expected that the $369 million capital sum involved in the master plan will go much higher—into the $600 or $700 million range.

● **Chicago.** The bulk of the Chicago Transit Authority's $4.5 million capital budget in 1969 goes for new buses and bus facilities, although $221,000 is for expansion of the Congress Terminal Shop. Reported elsewhere in this issue are large projects for CTA either due for completion in 1969 or still on the drawing boards.

The Chicago & North Western is going ahead with its "Northwest Passage" link with CTA downtown, contributing $190,000 toward the cost, with other funds from CTA, the city and DOT.

The C&NW will also spend $1.8 million to complete a $3.8 million coach servicing center at the California Avenue Yards (six tracks and repair workshops); and $165,000 for a new mechanical car washer. Car orders have crept upward slowly from 10 each in 1963 and 1965 to 16 in 1967 and 20 in 1968. With commuter service a profitable operation, more car orders are a possibility.

● **Cleveland.** A $9.9 million capital program depends on whether DOT will match the Cleveland Transit System's $3.3 million with another $6.6 million. The proposed CTS capital package covers $3.1 million for new central shops; $300,000 for land acquisition, construction and equipment for central supply facilities; a new power control system at Union Terminal ($200,000); converting four sub stations to silicon rectifiers ($295,000); a complete new sub-station at Euclid East 120th ($240,000); and conversion of the existing line to cab signaling ($367,000) to match cab signaling on the new airport line. Remaining expenditures are for buying new busses and new bus facilities.

● **Bay Area.** Finding an extra $145 million to complete the Bay Area Rapid Transist system has been the BART management's headache for the past six months. A number of bills were introduced in the State legislature that would have provided either for an increase in Bay Bridge tolls or a sales tax, to raise the additional money, but BART supporters were unable to agree on the formula and Gov. Ronald Reagan refused to put any BART bill on the agenda of the legislature's special session last fall.

Now it looks as though the sales tax approach has won. The state legislature, which reconvenes in general session this month, will be asked to approve a ½-percent sales tax increase in the Bay Area counties, to raise the additional money.

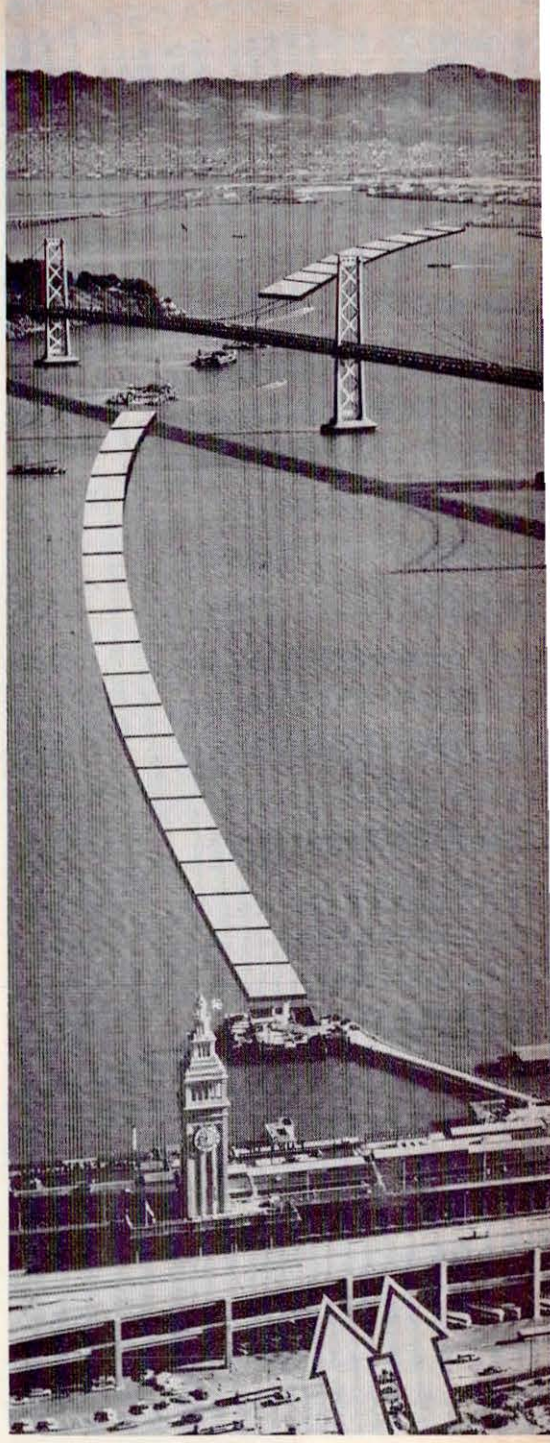
Once that is passed, BART may go ahead and float revenue bonds to match a DOT $28 million grant, and buy 250 cars. In any case, $120 million in other contract work stands ready to go this year.

Work in 1969 will continue on 30 out of 33 stations, plus track and electrification projects.

If all goes well, the first 19-mile segment between downtown Oakland and Hayward of the 75-mile system will be in service by early 1971.

Washington. Approval by Maryland

(Continued on page 26)



FINAL TUNNEL STAGE

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Frank Malone

WATCHING WASHINGTON

COMMERCE CHANGES WHIPS—By five votes, the Senate Commerce Committee missed having both Senate whips in its membership. But now it has the minority leader's assistant instead of the majority's, and the switch is significant.

SCOTT MOVES UP—Committee member Hugh Scott (R-Pa.) is the new Republican whip by a 23-20 caucus vote. At the same time, committee member Russell B. Long (D.-La.) loses as Democratic whip, 31-26. Though Long as whip shook transportation little, Scott as whip could be a different story. With the resignation of Thruston Morton (R.-Ky.), Scott becomes top minority member of the Committee's surface transportation subcommittee, and ranking (second) minority member of the entire Committee. There should be an addition to his side of the Committee to reflect GOP additions to the Senate. Then, there's a Republican President. Election as whip and the possibility of a cut in Foreign Relations Committee membership make a Scott move from Commerce unlikely—a move previously talked about.

HARTKE RISES, TOO—In line for chairmanship of Surface Transportation is Vance Hartke (D.-Ind.), who is up for reelection in 1970. High-speed passenger service isn't as big in Indiana as in Pennsylvania, but highways are. Hartke is viewed as pro-truck, and in rail matters pro-labor—both interesting campaign fodder. He's broader than that, according to another view, and would bring free participation to subcommittee decisions to replace the iron rule of former chairman Lausche.

BIG SHAKEUP POSSIBLE—With five members gone, three of whom were subcommittee chairmen, there's talk of a Committee regrouping that might include merger of two (surface and aviation) and maybe all (merchant marine, too) of the transport subcommittees. It's being discussed informally outside of full Committee proceedings. Also being talked about (assuming the subcommittees stay intact) is a move of Committee Chairman Warren G. Magnuson (D.-Wash.) to chairmanship of a subcommittee different from the one (consumer) he has now. A possibility is merchant marine and fisheries, of which he's top member. Assuming that next-in-line John O. Pastore (D.-R.I.) keeps chairmanship of the communications subcommittee, Hartke could take consumer or aviation if he doesn't want surface transportation. On Hartke's move depend the choices for two other Committee members whose terms are up in 1970.

Transit: Dirt will fly in '69

(Continued from page 23)

and Virginia suburban voters of referenda on bond issues totalling $207.5 million gave a big lift last fall to the Washington subway project.

If Congress authorizes a matching $24 million this year, ground-breaking on the 97-mile $2.5-billion system is a sure thing this summer.

First phase of construction will be underground stations and connecting tunnels at Judiciary Square-G St.-Lower Connecticut Ave. to Dupont Circle. Completion of the first six miles is due by 1972, and the entire system by 1980.

● **North of the border.** The Toronto Transit Commission is in the midst of the $80 million four-mile extension north of its Yonge St. line, a project begun last October and scheduled for completion in 1972.

A $200 million proposal for a Queen St. subway—part of the original plan when the Toronto system was first on the drawing boards—is getting consideration.

Also in the planning, not yet financing, stage is the Montreal Transportation Commission's $100 million proposal to add 10 miles of extensions to existing lines. In the meantime, MTC will spend $6 million this year for new buses.

● **What's iffy.** Other large schemes are hanging fire, and may or may not turn into action programs in 1969.

DOT made a $300,000 grant for feasibility studies of a 12-mile long rubber-tired system for Pittsburgh; the proposed route is from South Hills to the central business district.

A $96,666 DOT grant to the Bi-State Development Agency is to assist studies for mass transit in the St. Louis area.

Consulting engineers just recommended a 71-mile rubber-tired system for Baltimore (see p. 28).

Three cities where bond issues were turned down by the voters last year—Seattle, Los Angeles and Atlanta—are not expected to stay out in the cold forever.

Local planners, in almost every case with down-the-line support from community leaders, indicate they will try again. In Seattle's case, another referendum on a transit bond issue is almost a sure thing this spring. A DOT grant of $150,000 will help to support continuing engineering studies.

In Los Angeles and Atlanta, revisions of existing plans are possible, especially insofar as financing methods are concerned. ■

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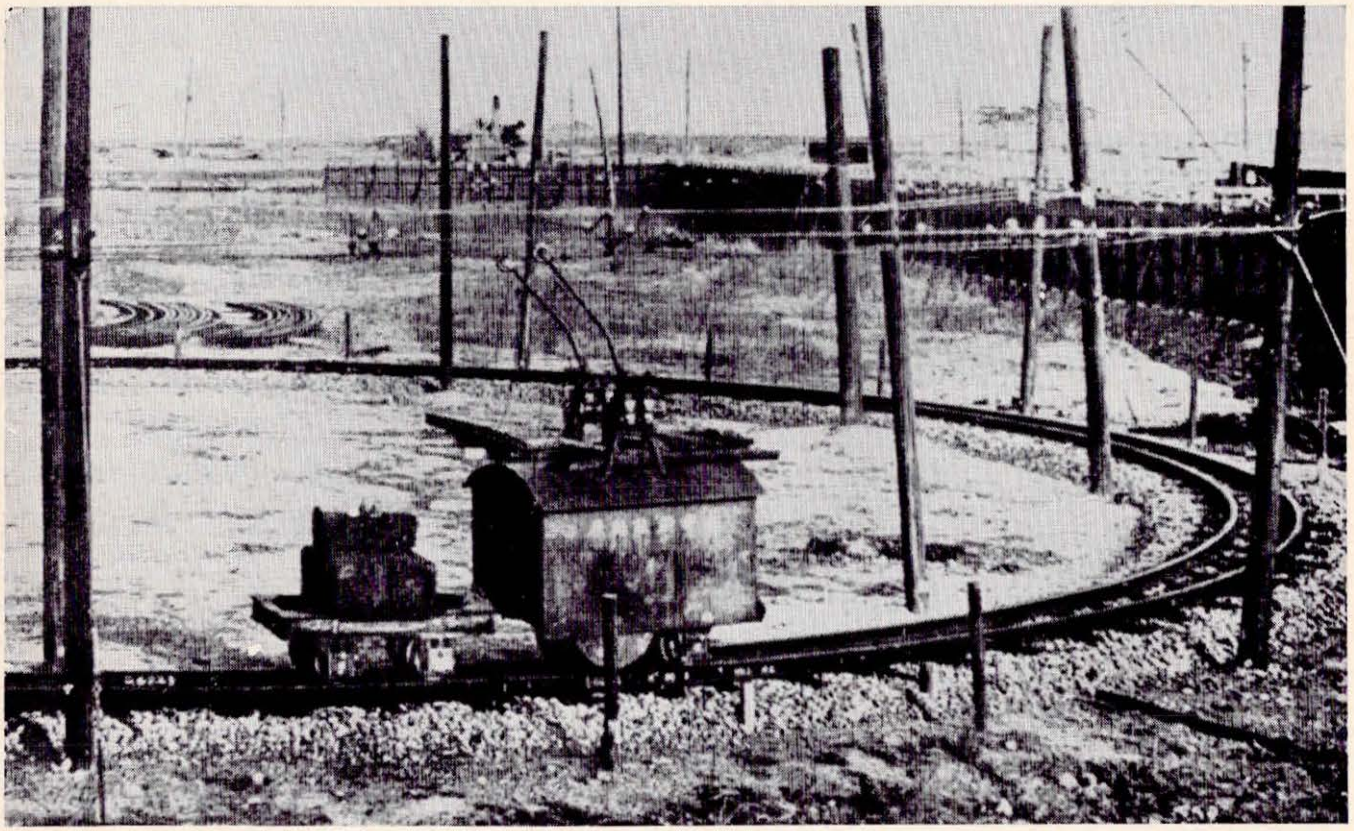

This photograph is 40 years old.
We took it at our Osaka Works in 1928 during a ten-year study of the abrasion of rails and rolling stock, in collaboration with the Japanese Government Railways. And presented the results of the research at the 2nd International Rail Assembly in Zurich in 1932.
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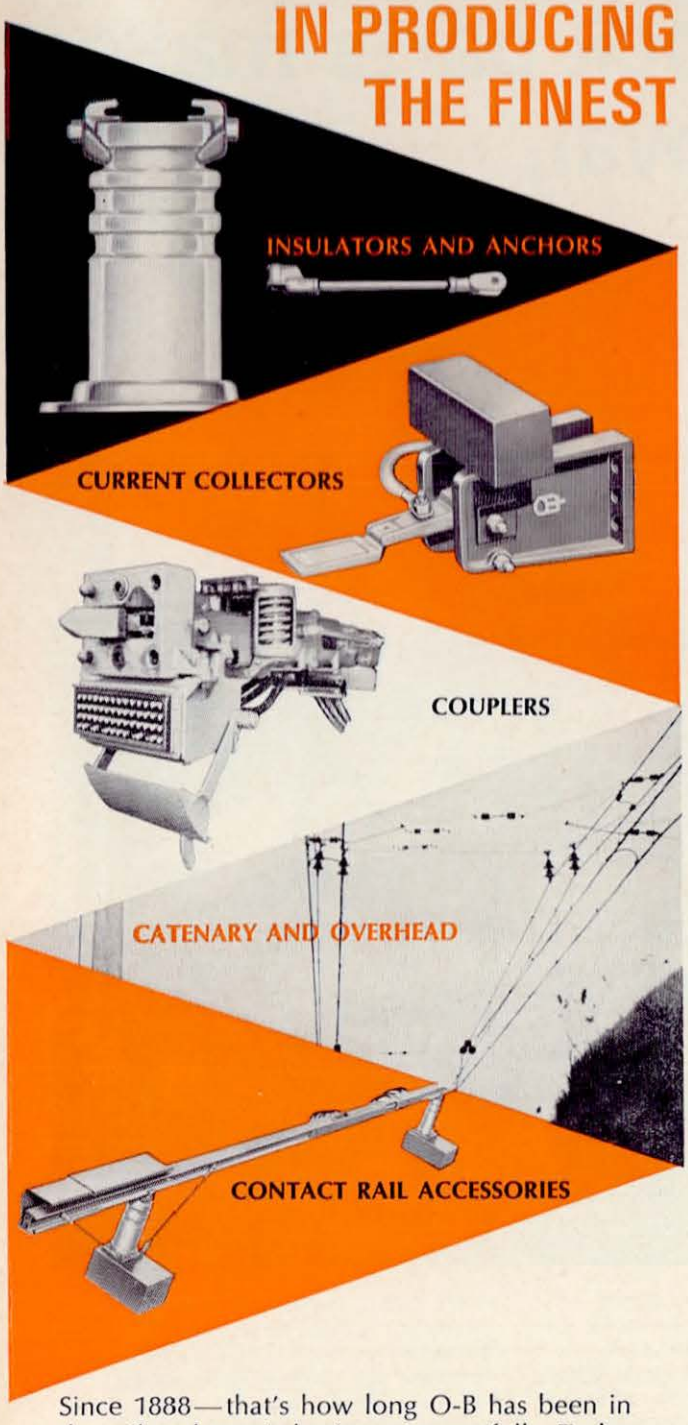

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Circle 10 on coupon page 31

TRANSIT ROUNDUP

Rubber-tired Baltimore system? The engineering joint venture of Daniel, Mann, Johnson & Mendenhall/Kaiser Engineers just issued a report recommending a 71-mile rapid transit system for Baltimore, with rubber-tired vehicles of the Skybus type as the key vehicle in the system.

This system, estimated to cost $1.7 billion, would have six radial lines from the center of the city, two of them with branches in outlying areas, one to Friendship Airport. There would be 22.8 miles of aerial line, 16 miles of subway, and 31.7 miles at grade (surface, cut or fill). In all there would be 63 stations, all equipped for automatic fare collection.

The system would be powered electrically at 600-V dc. Transit cars would be lightweight air-conditioned vehicles running on single-axle trucks, two axles with two pair of rubber tires on each axle, 41 ft 8-in. long and 9-ft 9-in. wide, with a capacity of 72 riders (36 of them seated), and maximum speed of 70 mph.

Vehicles would be equipped for automatic train control and run in train lengths of two to ten cars, depending on the particular corridor and time of day. Car shells may be aluminum alloy, stainless steel or steel with an appropriate finish.

In the first phase of construction, recommended to begin in 1971, two lines would be built, one from Charles Center to Randallstown, one from Charles Center to Glen Burnie and Marley Station, with a spur to Friendship airport, and 122 transit cars purchased. Remaining lines would be built in the 1974-79 period.

●

South Jersey line Opens: The Delaware River Port Authority joined the ranks of transit operating agencies at 6:00 a.m. Jan. 4, when the high-speed rapid transit line to Lindenwold, N.J. began service to the public.

Three years in the building and costing about $92 million, the highly automated new line was described in detail last year (RA, May 6, 1968, p. 18). Initial service is between Lindenwold and Camden; on Feb. 1, the full 14. miles of line into Philadelphia will be in operation.

●

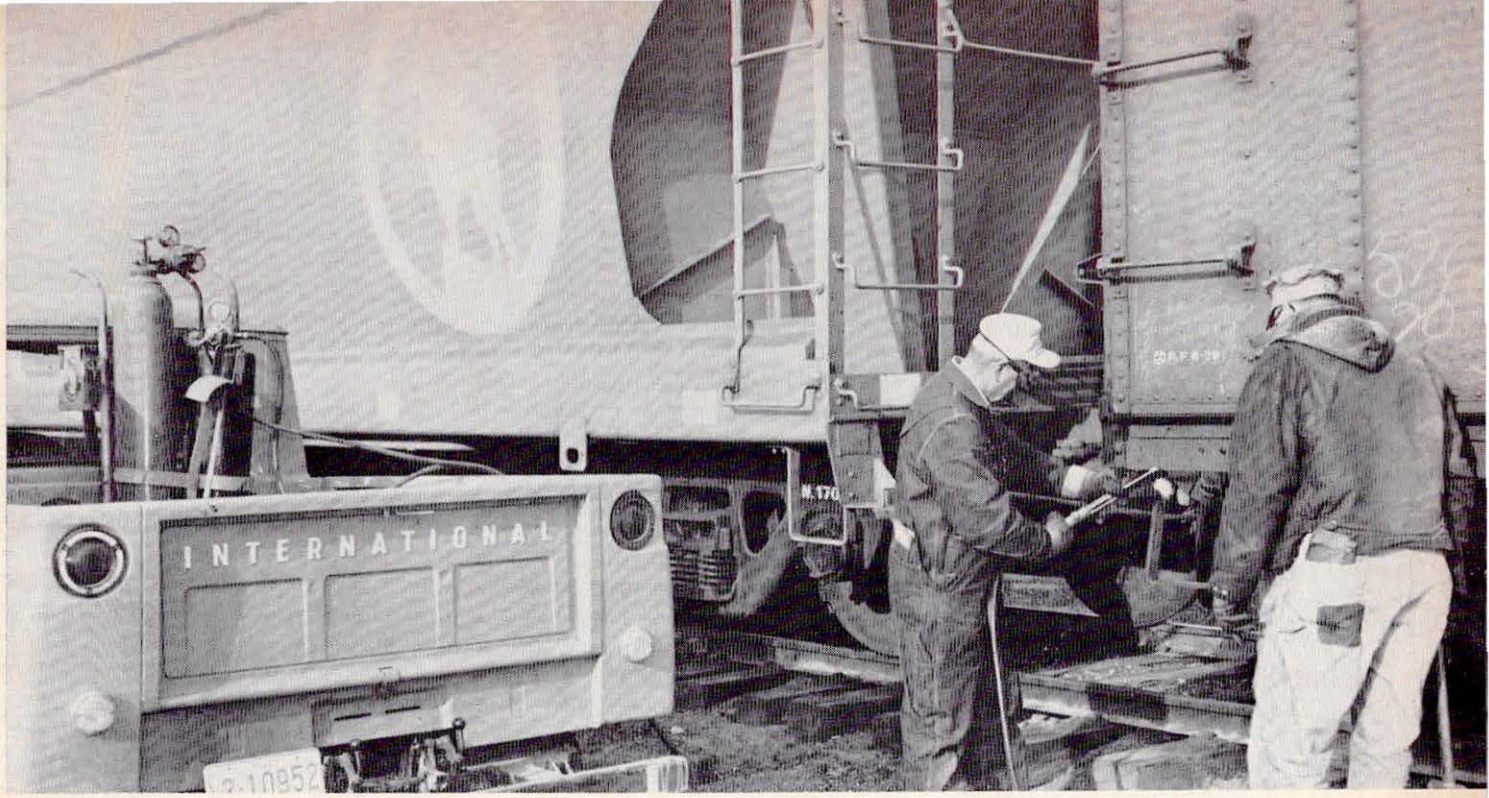
DOT grants: Capital grants of $2.5 million and technical study grants of $424,000 for transit projects around the country were announced by the Urban Mass Transportation Administration of the Department of Transportation.

Biggest of the capital awards was a $1.6-million grant to New Jersey's Department of Transportation, to aid in that state's mass transit program. The grant was a supplement to an earlier $5 million to assist in the purchase of 35 commuter cars for the Penn Central from General Steel Industries. Smaller DOT grants went to Alameda-Contra Costa (Calif.), Culver City, Calif., and Coral Gables, Fla.

Biggest technical study award went—$400,000—went to Baltimore's Regional Planning Council for continued work on their rapid transit plans (see above). The Massachusetts Bay Transportation Authority received $13,300 to aid in financing a median strip transit project; remaining funds went to Ann Arbor, Mich., for study of bus needs.

●

Washington Metro elects: The board of the Washington Metropolitan Area Transit Authority elected Frederick A. Babson as its new chairman. Babson the former WMATA vice chairman, is also a member of the Northern Virginia Transportation Commission. Rev. Walter E. Fauntroy, formerly second vice chairman, became first vice chairman, and Carlton Sickles, a member of the Washington Suburban Transit Commission (Md.), became second vice chairman. James P. Gleason, WMATA chairman during 1968, remains on the board. **—Joe Asher**



ON-THE-SPOT inspection and repairs obviate the need for time-consuming switching of defective cars to the rip track.

Car inspection: GN finds a better way

Under a new program, cars get an intensive inspection (and minor repairs) at the initial terminal. Result: Reduced train delays, improved service.

Want to save money, time and trouble? Want to get trains—and cars—over-the-road faster? Want to give the shipper more dependable service? Want to make a measurable contribution to the income accounts? Then take a look at car-inspection policies, practices and procedures, and train-yard operations. Chances are you'll find, as Great Northern did, that there's a better way.

GN made a study, at the request of its chief mechanical officer and with the whole-hearted approval of Vice President-Operations John L. Robson. The study team started out investigating one large terminal where the most potential improvement appeared possible. Then the study was broadened, as required. Other yard and terminal points fell into place, domino-fashion. GN came up with "definite improvements in train performance." GN, specifically, came up with these conclusions:

— A thorough car inspection and the completion of minor car repairs at initial terminal "will drastically reduce the number of penalty defects incurred enroute to train destination."

— Increased time required at initial terminals to perform the inspection and repairs "is more than offset by reduced time at intermediate terminals."

— Performance of minor repairs in the yard reduces switching costs, train delays and car-days spent on repair tracks.

— Performance up to the standards set in the study "can be accomplished with no increase in workforce."

• **How changes are made.** Getting terminals in shape to make this service improvement was not a particularly costly job. Mostly, it involved operational revamping—such things as specifically designating train arrival and departure tracks at all points; making manpower, vehicles and materials available in the yard; improving communications between car foremen and carmen and between foremen and yard supervisors; and, of course, setting up proper protection for carmen making train-yard car repairs.

As the study moved ahead over the system, standards and specific recommendations were instituted at 12 major points. Without exception, the program has resulted in reduced train delay and improved service.

The study committee itself was set up in late 1967, at the request of Chief Mechanical Officer R. G. Tausch. D. E. Whitney, general supervisor-air brakes, was named chairman of the group, which included a supervisor-air brakes, a GN FRA inspector, an assistant car foreman and two trainmasters. GN's car department superintendents, lines east and west, were added to the committee in mid-1968.

Whitney's team went to work first at Gavin Yard, at Minot, N.D., largest yard on the system. First, there was the study of existing practices, to de-

velop a thorough understanding of operations. Then came recommendations, covering three specific trains. Next came the monitoring, not only of Gavin Yard operations but also of operations and practices in other terminals which were affecting Gavin Yard operations.

• **What change meant.** Broadly, the proposals at Minot covered seven major areas:

— Five tracks were designated as arrival tracks for all trains, and provision was made for distribution of repair material and equipment adjacent to these tracks.

— The assistant car foreman's duties were realigned, to provide supervision at all times and to increase the efficiency of carmen's operations.

— Radio communication was installed. At the same time, GN instituted a procedure in which the car foreman's authorization was required before a bad-order car could be switched to a rip track for repair.

— Responsibility areas between yard and car forces were redefined and, as GN puts it a "common understanding" was reached.

— A blue-light or blue-flag rule was instituted for all yard operations, for safety purposes and to permit carmen to complete repairs in advance of switching operations.

— GN bought a yard repair truck, a Ford Bronco, to provide added mobility for supervision, repair forces, material and equipment.

— The signal governing hump-engine movements was relocated in a way which gave carmen sufficient time to oil all journals and permitted all cars to pass over the oiling station.

• **Payoff at Gavin Yard.** Among the results of the program at Gavin Yard: In one recent month, yard repairs totaled 4,681, up from a little more than 2,000 in the corresponding month of 1967; over a recent two-month period, AAR yard billings increased by more than 150% from the year before, while AAR total billings for this terminal just about doubled.

Developments at Gavin Yard, however, clearly showed the need for expanding the program to other terminals —and Sioux City, Iowa, was the second yard on the study list. Then came Minneapolis, St. Paul, Superior, Wis., and Grand Forks, N.D. In each case, the study and the procedures recommended were based on experience gathered as the investigation developed from terminal to terminal.

Implementation of these improved practices on the east end, GN says, cut westbound train delays at Gavin Yard and "produced the desired effect at intermediate terminals—including a reduction of train-time in-terminal, a reduction in the number of bad-order setouts, and a reduction in the number of FRA defects found.

GN'S BUSY "BRONCO"

Great Northern's rolling repair shop at Gavin Yard, largest yard on the system, is a custom-equipped Ford Bronco — outfitted with jib crane, power winch, lubricating-oil tanks and pumps, electric grease gun, gasoline-powered electric welder and 50-ton hydraulic jack, plus radio and the usual assortment of parts and tools needed for in-train car repairs.

Repair forces at Minot keep the Bronco busy. In one two-week period, for example, the truck and its crew added up 205 separate repairs—many of which might otherwise have forced cars onto the rip track, with consequent delay in movement. Most of the repairs involved handholds, ladders and sill steps, but the list also included repairs to uncoupling levers, release rods, air reservoir brackets, angle-cock brackets and trainline components.

• **Studies move west.** At this point in the program, the yard at Minot was applying improved recommended standards to all trains, eastbound and westbound. Delays were occurring on eastbound operations—and GN's study team promptly went to work on the west end of the line, starting at Hillyard, Wash., near Spokane. Other points in Washington, Oregon and British Columbia were covered, before the studies entered what might be termed their interline phase—expanding from GN onto Spokane, Portland & Seattle and Portland Terminal. Improvements worked out with both SP&S and PT benefited operations at Seattle and Hillyard, as did installation of the program at GN's terminals at Whitefish, Havre and Great Falls, Mont. As a means of reducing the workload at Great Falls, the program was also expanded to Butte, Mont.

• **Standards are set.** What did GN set up as uniform standards and procedures for all terminals? The list reads like this:

— Cast-iron brake shoes less than ½-inch thick and composition brake shoes less than ⅜-inch thick will be changed out.

— Piston travel of less than nine inches will be adjusted.

— Handholds, ladders, brake rods, brake control valves, air dates and repack dates and other items must be checked to insure their meeting FRA and AAR requirements.

— Initial terminal brake test must comply with FRA requirements.

— Blue-flag rule will be strictly enforced for train-yard repairs.

— Arrival and departure tracks will be clearly defined and material will be made accessible for repairs.

— Car foreman will authorize switching of bad-order cars to the rip track.

— Close communication will be established between yard and car supervisors.

— Minor repairs to cars will be made in trains, in lieu of switching cars to the rip track.

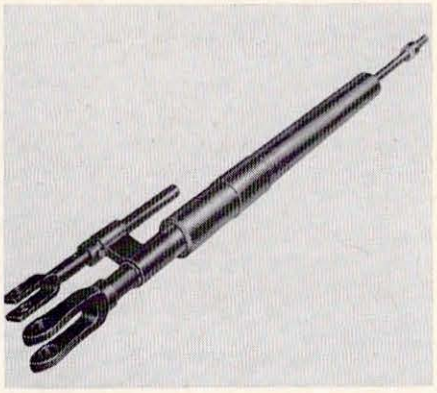
Within that basic and fairly simple framework, each terminal point made its adjustments. In some cases, repair forces were reassigned to bring available manpower and peak-load work periods into line. In a few instances, new arrangements were made for the spotting of "fill" cars so that inspections could be made more efficiently in advance of train departure. At some points, additional radio equipment was placed in service and repair vehicles were assigned, such as the Bronco truck at Minot, two smaller mobile units at Sioux City, and a yard truck at Spokane.

• **Keeping the program going.** What kind of follow-up is there to maintain the continuity of the program and its service improvements? There are regular reports, of course, to the general offices in St. Paul. But perhaps more important from the "communication" standpoint, there are terminal meetings on a semimonthly or monthly basis, depending on the size of the project involved. For each of a dozen major points, GN has a project manager—usually a division master mechanic. For each of these points, there is also a project coordinator—a division superintendent, assistant superintendent, supervisor of terminals or trainmaster is appointed by the coordinator to assist in the project. It's their job to ride herd —and to make sure that the standards and procedures so carefully worked out will continue to do the job they were designed to do. ■

NEW PRODUCTS REPORT

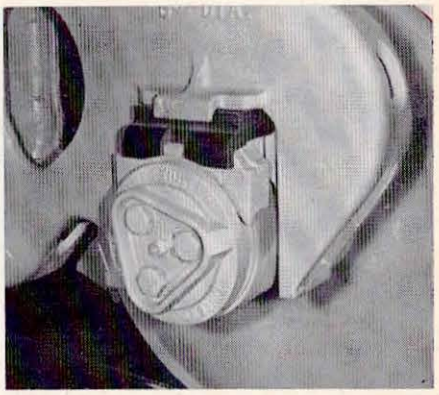
Chemical toilet (RA-1)

A chemical-type toilet being installed on Seaboard Coast Line camp cars after actual field tests includes a toilet compartment and a holding tank for application to underside of car, and quick-opening valve and associated fittings for servicing seat-box hopper container. Compartments are furnished in single or dual units positioned with toilet seats back to back and divided so that one hopper receiving tank and one holding tank suffice for either single or dual compartments. Gaskets on toilet seat, seat cover, and compartment door keep odors from getting into car itself. Weekly servicing consists of pulling a lever to open a valve which discharges from container under seat to holding tank, pushing lever in, locking in place, then putting properly measured chemicals in container under seat and adding 5 gallons of water. Operation is said to take less than 5 min. Holding tank needs servicing only every 3 to 4 months. An automatic fan which operates with the light switch keeps fresh air circulating when unit is in use. *Duval Chemical Toilets, Inc.*



Slack adjuster (RA-2)

Model 1900 double-acting automatic slack adjuster is designed for use on all types of freight cars and, when properly installed, will maintain a specified piston travel at all times. Features include heavy wall construction, 3¾-in. maximum body diameter for easy installation and rugged polyurethane rod wiper seals throughout; unit is partially filled with a special lubricant. Nested compression springs provide uniform load control throughout the 19-in. travel cycle. *Universal Railway Devices.*



Freight-car truck (RA-3)

The Buckeye Elasto-Cushion truck, available in four- and six-wheel versions, incorporates a special side-frame design which has an elastomer-and-steel pad above the standard roller-bearing adapter and within the pedestal jaws. Truck was designed to overcome excessive wear caused, says the manufacturer, by lack of lateral axle movement in roller bearings. A 30% reduction in peak lateral loads and a control of hunting tendencies of the wheels on tangent track are claimed. *Buckeye Steel.*

Wrought-steel wheel (RA-4)

The 40-in. D-40 wrought-steel wheel for diesel locomotives has a smaller hub diameter than standard A-40 wheel, facilitating machining on EMD locomotives. Its diameter tolerance of plus or minus ⅛ in. minimizes hub machining and represents an improvement over the proposed AAR specification which establishes minimum rim thickness at 2½ in. Entire wheel, or only the rim, can be heat-treated. *Standard Steel Div., B-L-H.*

Landing gear (RA-5)

The Model 50,000 E-Z-Lift trailer landing gear is tested for lifting capacity at 1,200 in.-lb input torque according to TTMA recommended rating procedure and certified lifting capacity is 50,000 lb. Gear also provides 170,000-lb static load capacity. The two-speed unit has special gear train arrangement for faster lifting with minimum effort. In high gear, only 1.6 crank turns are required per inch of travel. *Binkley Co.*

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TRANSIT

Leon M. Cole named acting director, Systems Research and Development Division, **U.S. Department of Housing & Urban Development,** Washington, D.C. Mr. Cole will be responsible for the first of three primary functions of HUD's recently established office of Urban Transportation Development and Liaison. The new Office will: (1) administer urban transportation, research, technical studies and training programs, (2) coordinate planning activities with the Department of Transportation and (3) analyze and recommend government action on projects that have significant impact on the urban enviroment.

OBITUARY

Edward J. Healy, general superintendent of investigations and claims, **Chicago Transit Authority,** died Dec. 11 in Resurrection hospital, Chicago.

Joseph K. Herman, 62, director of purchases and materials, **Reading Co.,** Philadelphia, died Dec. 26.

Edward W. Liby, field service representative, **Western-Cullen Division, Federal Sign & Signal Corp.,** died Dec. 12, 1968.

James P. Maher, 65, retired sales vice president, **Griffin Wheel Co.,** Chicago, died Dec. 16, 1968, at his home in Dunedin, Fla.

Clarence A. Martenson, 76, retired assistant signal engineer, **Chicago & North Western,** died Dec. 6 in Port Charlotte, Fla.

Will H. Reaves, 78, president, **Will H. Reaves, Inc.,** died Dec. 11 in Barnes Hospital, St. Louis, Mo. For many years Mr. Reaves represented the P & M Co., Rail Joint Co. (both now PORTEC, Inc.) and National Lock Washer Co.

Carlton T. Sills, 69, retired advertising and publicity manager, **Denver & Rio Grande Western,** died Dec. 18, 1968.

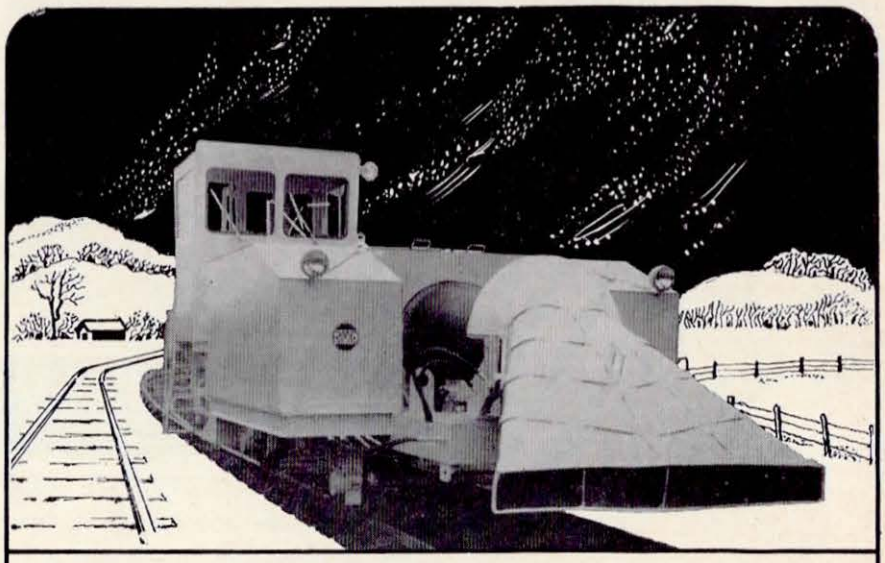
W. Donald Steele, 73, who retired in 1960 as vice president, secretary and treasurer, **Wabash** (now Norfolk & Western), died Dec. 7 at Columbia-Presbyterian Medical Center, New York.

Malcolm O. Strom, 60, retired general agent, passenger department, **Santa Fe,** died Dec. 4 at his home in Palos Hills, Ill.

DIVIDENDS DECLARED

PIEDMONT & NORTHERN.—60c, quarterly; 85c, extra, both paid Dec. 21, 1968, to holders of record Dec. 6.

PITTSBURGH & LAKE ERIE.—$1.50, quarterly; $1.50, extra, both payable Jan. 15 to holders of record Dec. 31, 1968.



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RMC **Snow Blowers**

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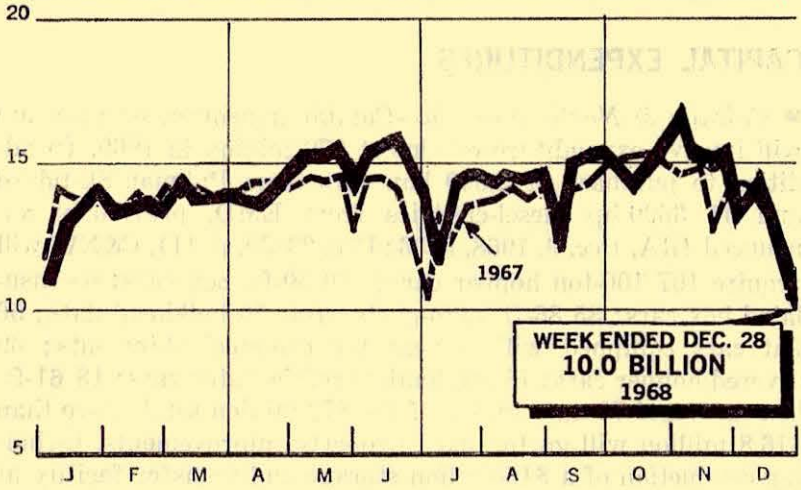
RAIL FREIGHT TRAFFIC TRENDS

BILLION TON-MILES (Estimated)



Source: Association of American Railroads

SHIPMENTS OF RAILROAD STEEL PRODUCTS

(OCTOBER AND FIRST 10 MONTHS 1968)

	NET TONS			
	October	Per Cent Change*	Ten Months	Per Cent Change*
Rails, trackwork and equipment	70,727	+61.6	822,589	+6.5
Freight and passenger cars and locomotives	132,397	−24.8	1,669,211	−13.6
Street railways and rapid transit systems	11,592	+97.1	70,571	+58.5

*Per cent change compares 1968 periods with like 1967 periods.
Source: American Iron and Steel Institute.

Current Statistics

Net income, Class I roads	
Nine months, 1968	$386,000,000
Nine months, 1967	342,200,000
New freight cars on order	
Nov. 1, 1968	21,395
Nov. 1, 1967	21,062
New freight cars delivered	
10 months, 1968	47,595
10 months, 1967	72,490
Serviceable cars	
Dec. 1, 1968	1,385,269
Dec. 1, 1967	1,414,632

CAPITAL EXPENDITURES

● *Chicago & North Western*—Capital improvement program will involve expenditure of almost $72 million in 1969. In addition to purchase of 2,000 box cars from Pullman-Standard and 41 3600-hp diesel-electrics from EMD, previously announced (RA, Dec. 9, 1968, p. 33; Dec. 23/30, p. 11), C&NW will acquire 107 100-ton hopper cars; 100 50-ft. box cars; 65 insulated box cars; 35 86-ft. auto-parts cars; 50 bulkhead flats; 50 flat cars equipped with covers for coil-steel shipments; 69 covered hopper cars; 18 mechanical refrigerator cars; 18 61-ft. box cars; and 70 auto racks. Of the $72 million total, more than $16.8 million will go for fixed property improvements, including completion of a $16-million storage and transfer facility at Escanaba, Mich. (RA, Nov. 25, 1968, p. 72); completion of a $3.8-million passenger car service center at Chicago; acquisition of new mechanized equipment for M/W work; extension of microwave between Clinton and Marshalltown, and between Oelwein and Des Moines, Iowa; and installation of hot box detectors with emphasis on the former Chicago Great Western line between Oelwein and Kansas City. In addition to the capital program, C&NW is budgeting some $4.3 million for M/W work chargeable to expense.

● *Erie Lackawanna.*—Will invest aproximately $25.5 million in capital improvements in 1969, of which $19 million will be spent for new equipment.

● *Norfolk & Western*—Has earmarked $96 million for an equipment acquisition program in 1969, including previously announced orders for 2,000 box cars, costing $31 million, from ACF.

● *Reading.*—Capital-spending program for 1969 will include: construction or rebuilding of 850 freight cars, $12 million; 10 new locomotives, $1.6 million; new locomotive and car repair facility in Philadelphia, $1.5 million; miscellaneous work, including laying of continuous welded rail and grade crossing improvements, $2.5 million.

MAINTENANCE EXPENDITURES

● *Third quarter 1968 up 6.98%.*—Expenditures by Class I roads for maintenance of equipment, way and structures in the third quarter of 1968 were up about $55 million, compared with the third quarter of 1967 according to report of AAR Economics & Finance Department, summarized below.

	Third Quarter		
	1968	1967	% Change
Maintenance of way and structures	$369,901,149	$332,315,715	+11.3
Maintenance of equipment	477,238,811	459,576,556	+ 3.8
Totals	847,139,960	791,892,271	+ 6.98

MARKET OUTLOOK

CARLOADINGS

Loadings of revenue freight in the week ended Dec. 28 totaled 378,296 cars, the Association of American Railroads announced on Jan. 3. This was a decrease of 142,908 cars, or 27.4%, compared with the previous week; a decrease of 18,904 cars, or 4.8%, compared with the corresponding week last year; and a decrease of 37,348 cars, or 9.0%, compared with the equivalent 1966 week. Ton-miles generated by carloadings in the week ended Dec. 28 are estimated at 10.0 billion, a decrease of 3.7% below the corresponding week of 1967, and 4.8% below the 1966 week.

REVENUE FREIGHT CARLOADINGS

District	1968	1967	1966
Eastern, including Allegheny and Pocahontas	137,858	160,348	165,643
Southern	86,146	79,030	85,872
Total Eastern and Southern Districts	224,004	239,378	251,515
Northwestern	40,634	45,876	49,160
Central Western	85,907	83,913	86,415
Southwestern	25,751	28,033	28,554
Total Western Districts	154,292	157,822	164,129
Total All Roads	378,296	397,200	415,644
Commodities:			
Grain and Grain Products	28,708	35,726	40,542
Livestock	741	855	1,132
Coal	83,175	79,123	90,190
Coke	7,064	7,400	7,397
Forest Products	28,154	23,183	24,660
Ore	13,798	15,134	15,034
Merchandise l.c.l	2,477	3,105	4,506
Miscellaneous	214,179	232,624	232,183
Dec. 28	378,296	397,200	415,644
Dec. 21	521,204	503,022	523,223
Dec. 14	549,986	533,635	550,533
Dec. 7	546,238	555,545	562,669
Nov. 30	511,826	556,715	572,189
Cumulative total, 52 weeks	28,231,202	28,083,751	29,623,115
Estimated revenue ton-miles (billions) 52 weeks	742.9	719.4	738.4

PIGGYBACK CARLOADINGS

U. S. piggyback loadings for the week ended Dec. 28 totaled 17,066 cars, carrying 27,369 trailers, compared with 18,109 cars, carrying 29,822 trailers, in the corresponding 1967 week. Loadings for 1968 up to Dec. 28 totaled 1,337,149 cars, carrying 2,174,616 trailers, compared with 1,207,242 cars, carrying 1,983,793 trailers, in the corresponding period of 1967.

IN CANADA

Carloadings for the seven-day period ended Dec. 7, 1968, totaled 72,616 cars, compared with 95,882 for the previous nine-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd. from Connections
Totals for Canada		
Dec. 7, 1968	72,616	25,005
Dec. 7, 1967	71,692	25,117

FREIGHT-TRAIN CARS

● *Canadian National.*—Ordered 300 70-ton mechanical refrigerator cars from Hawker Siddeley, Canada, Limited, at a cost of $11 million. Delivery will begin in June 1969 and is to be completed in August.

● *Great Northern.*—Ordered 150 77-ton, 50-ft, 8-in., single-sheathed box cars from Pacific Car & Foundry for delivery in autumn of 1969; and 20 30-ft cabooses from International Car for delivery in June. Box cars will be equipped with cushioning devices, nailable steel flooring and load dividers. Cabooses will be equipped with wide-vision cupola and cushion underframe.

● *Thrall Car.*—Reported orders from an unspecified number of railroads for approximately 1,000 auto-parts box cars. Orders are about equally divided between 60-ft and 86-ft units. Total costs will be about $30 million; deliveries are scheduled for completion during second-quarter 1969. All 86-ft cars will be equipped with end-of-car cushioning; all but a few cars (these equipped with 70-ton trucks) will be of 100-ton capacity. All 60-ft cars will be of 100-ton capacity; both end-of-car and sliding-sill cushioning devices will be used, depending on individual specifications.

● *November bad order ratio 0.1% lower than 1967.*—Class I roads on Nov. 1, owned 1,463,488 freight cars, 29,753 less than on Nov. 1, 1967, according to AAR report summarized below. Bad order ratio was 0.1% lower than last year.

	Nov. 1, 1968	Nov. 1, 1967	Change
Car ownership	1,463,488	1,493,241	−29,753
Waiting repair	76,666	78,860	− 2,194
Repair ratio	5.2%	5.3%	− 0.1%

CAR OWNERSHIP

● *Serviceable cars.*—Revenue freight cars in serviceable condition owned by Class I railroads on Dec. 1, 1968, totaled 1,385,269, compared with 1,414,632 on Dec. 1, 1967, according to most recent AAR Car Service Division report.

ESTIMATED OWNERSHIP—ALL REVENUE FREIGHT CARS

(Dec. 1, 1968 vs. Dec. 1, 1967)

		Box	Covered Hopper	Gondola	Hopper	Flat	Refrig.	All Others	Total
Class I	1968	552,425	122,800	197,572	411,122	68,285	52,125	56,603	1,460,932
	1967	571,449	119,120	203,007	420,943	66,727	51,182	59,321	1,491,749
RRO&C	1968	0	0	0	0	0	47,774	0	47,774
Refrig.*	1967	0	0	0	0	0	51,885	0	51,885
Private	1968	1,196	29,316	771	3,479	43,802	16,086	173,400	268,050
	1967	1,461	27,615	295	2,610	40,896	14,443	171,912	259,232
Class II & S&T†	1968	8,067	769	4,863	7,934	570	808	1,033	24,044
	1967	9,224	819	5,306	8,379	648	688	1,154	26,218
GRAND TOTAL	1968	561,688	152,885	203,206	422,535	112,657	116,793	231,036	1,800,800
	1967	582,134	147,554	208,608	431,932	108,271	118,198	232,387	1,829,084

*Railroad owned and controlled refrigerator car lines.
†Class II railroads and switching and terminal companies.

YOU OUGHT TO KNOW

Long Island introduces Metropolitans

A month after delivery, the first eight-car train of Metropolitans, the new high-speed passenger equipment for the Long Island, entered revenue service at the end of 1968. The Metropolitan Tranportation Authority, which now operates the LIRR, expects that additional trains will be introduced regularly and Budd, the car-builder, is pushing production to a level which is to deliver 28 of the 100-mph cars monthly. An earlier description of these cars (RA, Dec. 2, 1968, p. 18) incorrectly identified the manufacturer of the trucks. The special air-and-coil-spring running gear was designed and produced by Budd.

History is NP's gift to Minnesota

Documents relating more than a century of American history are Northern Pacific's gift to the Minnesota Historical Society. The NP collection is said to be the largest, most significant and most complete single set of archival documents covering the history and development of Minnesota, the Dakotas, Montana, Idaho, Washington and Oregon.

First edition for new union publication

The first issue of UTU Transportation News went to press Jan. 2—as one of the first evidences of the merger of four operating organizations into the United Transportation Union. In the past, three of the unions—the Firemen, Conductors and Switchmen—published tabloids; the Trainmen had weekly newsletters plus a once-a-month tabloid. UTU/TN—with, presumably, a lot to talk about—will combine formats, alternating the newsletter and the tabloid, week-on and week-off.

IC simplifies top management line of command

Illinois Central has restructured its top management, with the election of Otto H. Zimmerman as senior vice president-operations and Richard P. de Camera as vice president-administration. Zimmerman will continue to head IC operations and will also have responsibility for maintenance of equipment, maintenance-of-way and operations research. De Camera will continue to head IC's management information and data-processing operation (renamed as the communications and computer services department) and will also have responsibility for the purchases and materials department. IC President W. B. Johnson noted that the railroad "is part of a growing organization, Illinois Central Industries. This reorganization will reduce the number of departments reporting to the president and will enable the railroad to move along its own path of development more effectively."

Penn Central sells Strick, trailer builder

The Strick Corp. and its affiliates have been acquired from the Penn Central by a group including Prudential Insurance Co. of America, Lehman Bros. and the management of Strick, a trailer builder. Strick was acquired by the New York Central on Nov. 1, 1966, 15 months before NYC merged with the Pennsylvania.

New Jersey asks federal funds for park-and-ride

The State of New Jersey is seeking Federal fringe parking funds to help pay for a $1.4-million park-and-ride railroad station for Penn Central commuters in Woodbridge Township. This is the first such request by New Jersey under the Federal Aid Highway Act of 1968, which provides that land adjacent to federally aided highways may be acquired for parking for public transportation facilities.

High speed trains up to Albany?

Testing of high speed rail service between New York City and Albany, with possible future extension to Buffalo, was recommended in the policy and plans report just issued by the New York State Dept. of Transportation.

Richard C. Grayson
Frisco

J. E. Gilliland
Frisco

James H. Brown
Frisco

Lawrence Lawless
IC

Arnold C. Anderson
SFBART

William M. Reedy
SFBART

PEOPLE IN THE NEWS

AKRON, CANTON & YOUNGSTOWN.—Vincent H. Johnson, president, named chairman of the board. **Earl R. Hostetter,** assistant to the vice president—operations, **Norfolk & Western,** elected president and general manager, AC&Y, N&W subsidiary.

FRISCO.—Richard C. Grayson, vice president—operation, elected president, effective Jan. 1, succeeding **J. E. Gilliland,** who will remain as chairman and chief executive officer. Their headquarters will remain at St. Louis. **James H. Brown,** assistant vice president—general manager, elected vice president—operation, Springfield, Mo.

ILLINOIS CENTRAL.—Lawrence Lawless appointed assistant vice president real estate, **Illinois Central Industries and Railroad.** He was previously general attorney for the railroad.

JERSEY CENTRAL.—Emanuel T. Libby, general foreign freight agent, New York, retired Dec. 31, after over 48 years of service in the freight traffic department.

KATY INDUSTRIES, INC.—Jacob Saliba elected president, to succeed **Edward A. Merkle,** elected to the newly created position of chairman of the board. Mr. Saliba was formerly president, **Frozen Foods Division, W. R. Grace & Co.**

LONG ISLAND.—Ronald C. Kane, former assistant director of public relations, LI, appointed to be community relations staff, **Metropolitan Transportation Authority.** He will assist the Authority in projects primarily related to the LI and the MTA's development program for it. **Dennis P. Leavy,** formerly a research analyst, MTA, has joined the public relations staff of the LI to assist in writing and producing news releases and public correspondence.

SAN FRANCISCO BAY AREA RAPID TRANSIT DISTRICT.—Arnold C. Anderson elected president, succeeding **James P. Doherty. William M. Reedy** elected vice president, to succeed Mr. Anderson.

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SUPPLY TRADE

In connection with the expansion of the Transportation Systems Division, **General Electric Co.**, Erie, Pa., the following appointments were made, effective Jan. 1 (former positions in parentheses): **Olaf F. Vea,** general manager, Locomotive Department (general manager, Locomotive and Car Equipment Department); **C. E. Hart,** general manager, Diesel Engine Department (manager, Transportation Equipment Products Operation); **Norman W. Seip,** general manager, Transit Systems Department (manager, Transportation Equipment Projects and Marketing Operation); **John R. Schrecongost,** general manager, Transportation Propulsion Department (manager, motor manufacturing); **Frank W. Crimp,** manager, Advanced Transportation Development Operation (manager, Advanced Planetary Programs); and **John H. Kathman,** manager, Transportation Parts Service Operation (manager, locomotive manufacturing).

Louis E. Nelsen appointed sales manager, Railroad Division, **Brenco, Incorporated,** Chicago.

Frank K. Semans has been appointed district sales manager, **PORTEC, Inc.,** with headquarters in Philadelphia. He succeeds **W. J. Acker,** retired.

Lingan S. Randolph, supervisor of locomotive performance, **Penn Central,** has been appointed railroad product manager, **Audn,** Hamburg, N.Y. He will be in charge of marketing and assist in the development of new Audn electronic instruments for railroad use.

Louis E. Nelsen
Brenco

Frank K. Semans
PORTEC

Richard M. Alberts, sales secretary, **Griffin Wheel Co.,** has been named to the newly created position of assistant to the vice president-sales. **William C. Hobson, Jr.,** named sales engineer.

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VIEWPOINT

Piggyback isn't what the public wants to hear about

Alan Boyd, the retiring Secretary of Transportation, said in a recent television interview that the nation *needs* passenger trains, and the nation is going to *have* passenger trains, whatever the cost. He left two questions unanswered—indeed, unasked:

(1) What kind of trains?

(2) At whose cost?

These questions may well be as important as any facing the industry in 1969. True, passenger trains account for less than 5% of railroad revenues. But they account for 95% of public attitudes; and as FRA Administrator Scheffer Lang has pointed out, public attitudes and Congressional attitudes are indistinguishable one from the other. As Lang has also pointed out, these attitudes are profoundly important if railroads are going to survive as privately-owned, quasi-public enterprises.

Unfortunately, most Congressmen, like their constituents, know little, and care next to nothing, about our vaunted strides in freight technology. But nearly all Congressmen know a lot, and care deeply, about the way the "Afternoon Congressional," for example, is operated.

Does this suggest that railroads have had it, with the public and with Congress—unless they are willing to embalm yesterday's train, prop it up, and pretend it's still alive?

Not at all. Railroads actually have a good story to tell, if they'd only start telling it.

The fact is, all of us (when we don't evade the issue completely) talk far too much about what we're not going to do for the passenger and not nearly enough about what can and must be done.

What must be put across is the fact that tomorrow's passenger trains will be just that—tomorrow's. Not yesterday's.

They will race at high speeds through heavily populated corridors —as Japan's New Tokaido Line trains, England's Manchester Line trains, and most of Europe's TEE trains do.

Our government will have to do a large part of the financing, as the governments of Japan, England and Europe have done. It won't be money down the drain. The government will start getting its investment back at break-even-point-plus 1, which is precisely what the government has in mind in underwriting the supersonic jets.

A POSITIVE APPROACH

This week, the first "Metroliner" trains go into service between Washington and New York. "TurboTrains" will soon be operating between Boston and New York.

So far, most of the publicity involving these trains has been generated by the delays encountered in de-bugging them. To our knowledge, they have not been nationally advertised (as have, for example, piggyback and unit trains) as the railroad industry's contribution to tomorrow's transportation.

Those piggyback and unit-train ads are great. But they do not answer the big question in the public mind.

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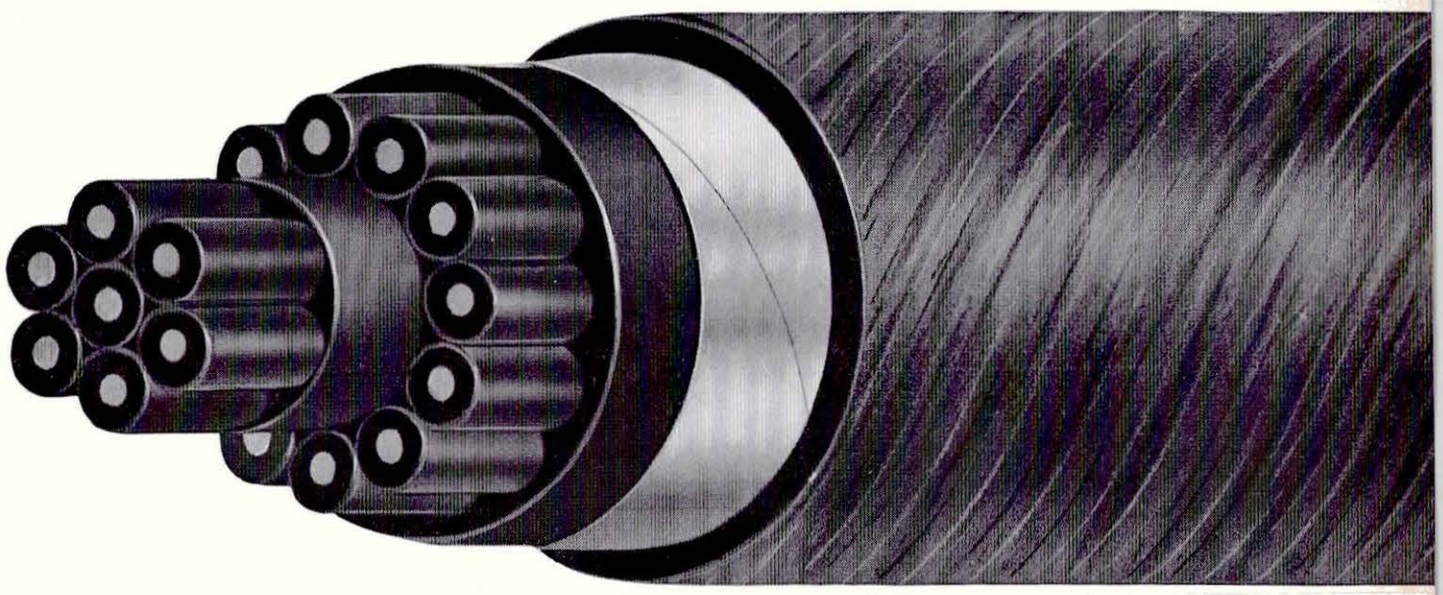

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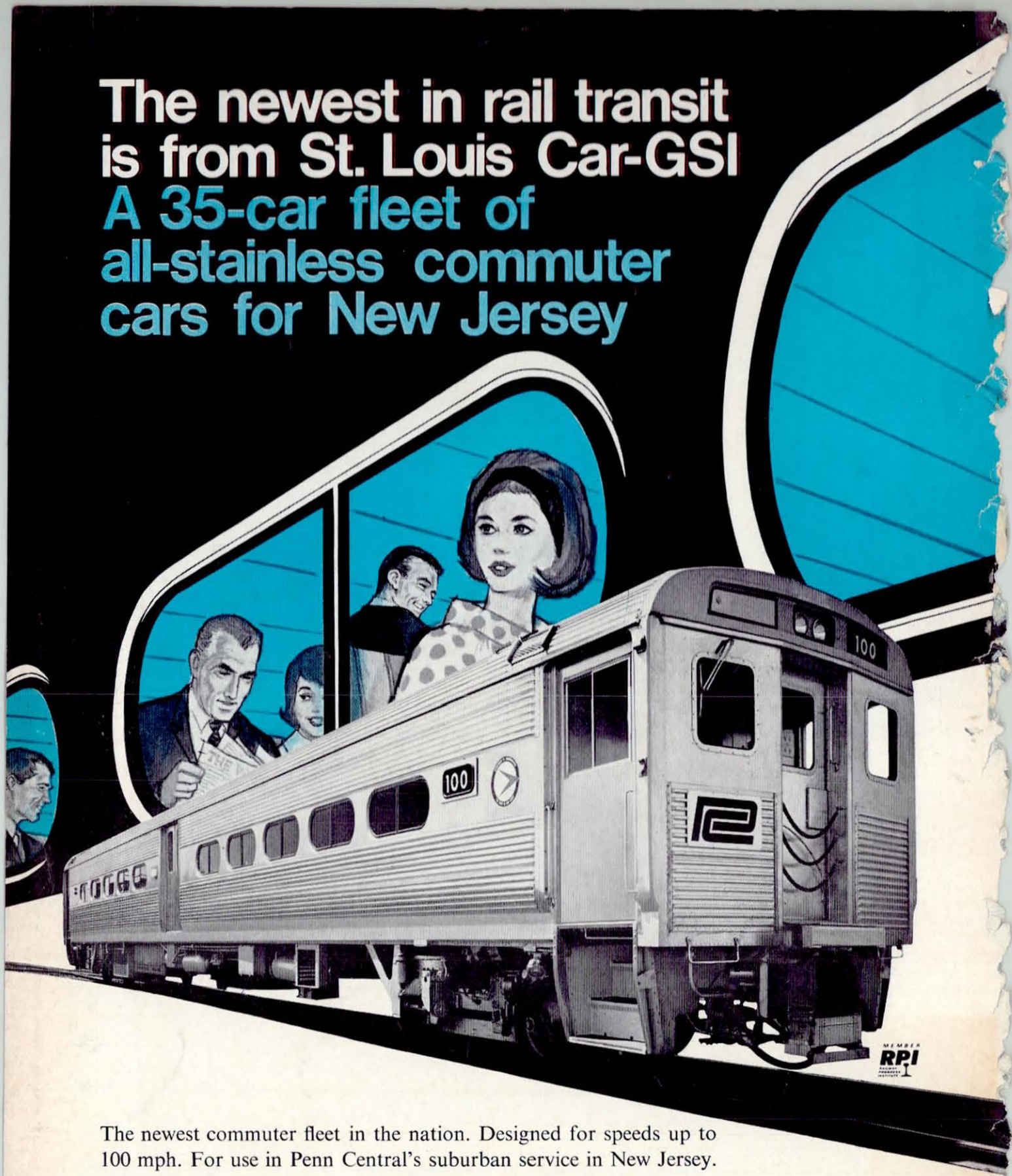

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